

# DVR system

## USER'S GUIDE

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## Introductions:

Thank you for purchasing our DVR system. This operation manual is to introduce how to set DVR system and explain each function of DVR system for you to use the system effectively and stably.

Operators should go through this manual thoroughly before you install/utilize this DVR system. You can get this manual from your dealer or contact us directly.

Note: Please set the resolution of monitor as 1024\*768 pixels before using this system.

## System features:

- Hardware support H.264 compression, low HDD cost
- Web access through LAN or WAN.
- Real time full-motion video-capture & display (Up to 64 channel video input)
- Real time high-speed recording: Up to 30 fps per channel
- Synchronous audio recording (optional)
- Motion detection (Whole area or up to 12 detection zones per channel)
- Normal recording (continuous) and event recording (Motion detection or external sensor)
- Electron Map pop-up when alarm happens
- System operating and alarm logging
- Alarm-before recording
- Remote recording
- Sending alarm message automatically.
- Sending alarm image to email box as attachment automatically
- Matrix display and group display
- Duplex mode (Recording while playback)
- Network support (Remote access via LAN, Ethernet, PSTN, ISDN, ADSL)
- P/T/Z/F & speed demo control on keyboard
- Search/playback by date/time directory (random-access)
- Backup & burn CD directly
- Remote talking between server and client or server and server

## Important Information:

For optimal performance of your system, it is important to follow these recommendations.

1 We recommend that you divide your hard disk into two partitions (E.g. C and D:) at least. The first partition is used to install Windows OS and system software, the other for storing record files.

2 Please use appropriate motherboard and display card. Contact your dealers or our support engineers if you have questions.

## **Recommended System Requirements**

Chipset: Intel 845PE, 865PE, 875PE, 915P, 945P

Motherboard: Intel: D915/945PCY, D865PERL

Asus: P4P800SE, P5P800 MSI: 865PE Neo2-F, 915/925/945;

Gigabit: GA-865GME, GA-945PL-G etc

Video Card: ATI Radeon 9250 128MB, ATI Radeon 9550 128MB, ATI X500, X550, X700 etc;

Processor: Intel Pentium 4 2.4GHz or better

Memory: 512MB minimum

# Chapter1 Start up and Main Interface

## 1.1 Start up

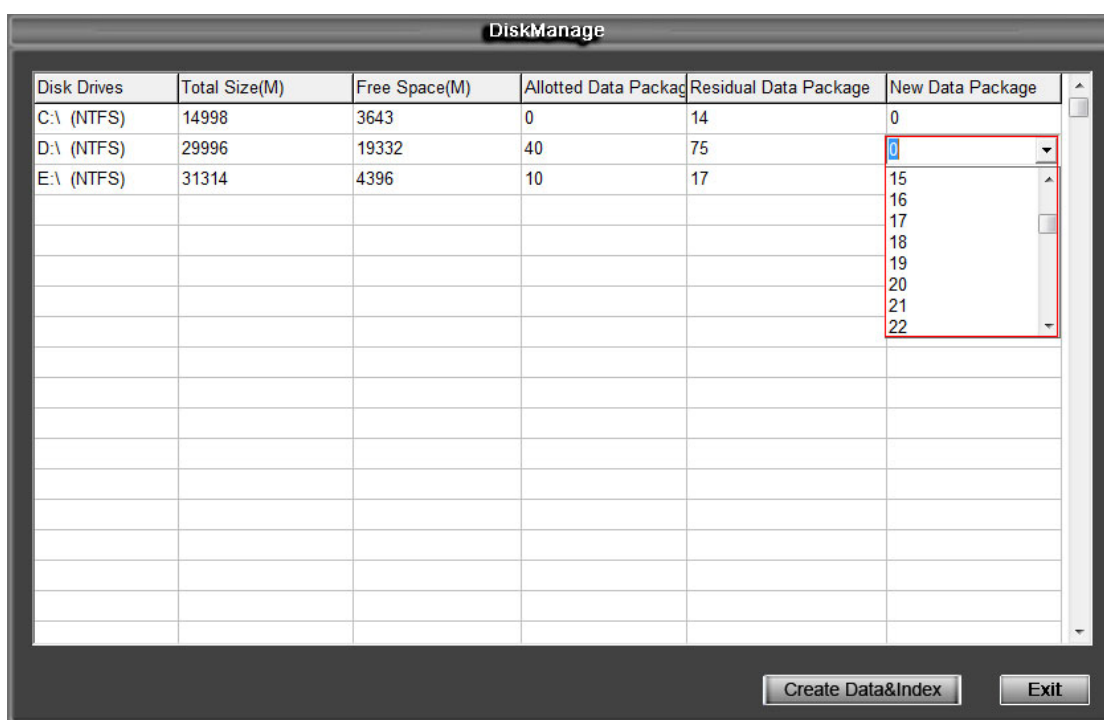
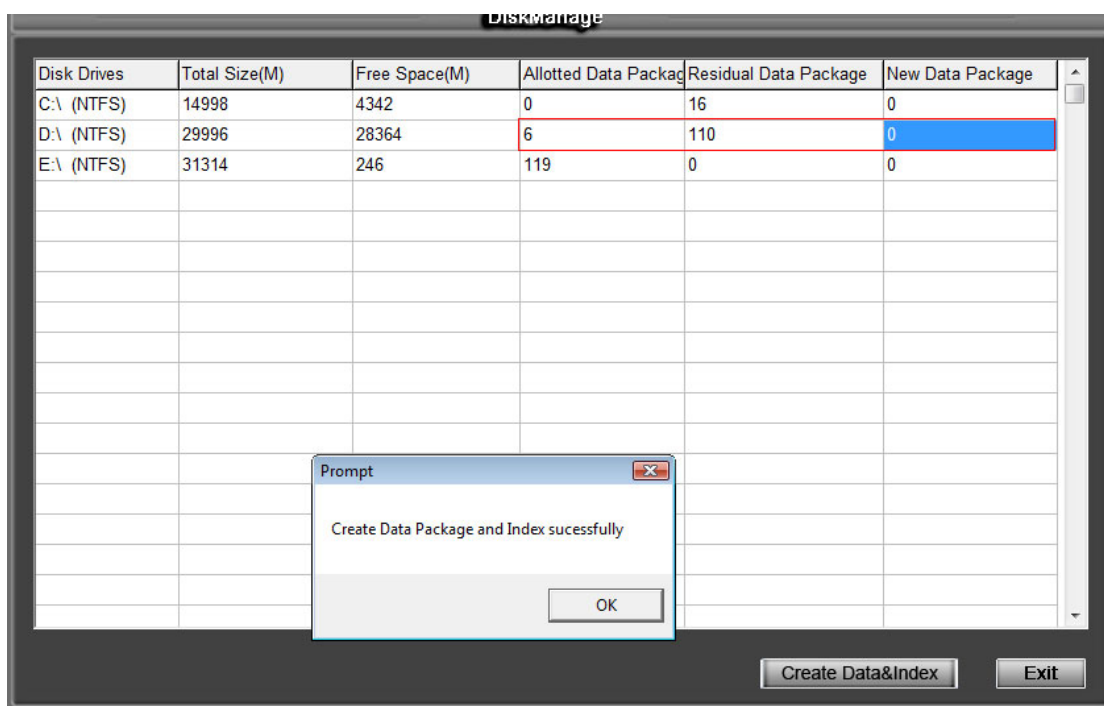
### 1.1.1 File management system

Notice: If you don't create the file management system first, you will not be able to record.

When you install the software, you will see this interface:







you can select the number of the new data package in the drop-down list. The rest space could be calculated by the software automatically.


**Notice:** the space of the package is 256M as the default, you can't change it.

**Notice:** The disk manage system allot the disk space beforehand to save the record data, it is usefulness to reduce the disk fragment.

1). Before you run DVR server, please check all connectors are firmly connected.

2). By default, DVR Server application will run and initialize cards automatically (total time is determined by the number of channel, about 4-10s).



Otherwise, you should Left-Double-Click shortcut icon  to start it. The main interface is as follow:



**Notel:**

When you run the system first time and you do not have the valid register of the cards, system will popup a dialog to show that you work in test mode. After you confirm it, system will work in test mode normally.

## 1.2 Main Interface

### 1.2.1 Show tips

1. When the mouse moves closely or stops above a button, a text tip will be shown to interpret the function of it immediately.

2. Zoom in/out video image: Left-Double-Click a camera window to zoom in/out video image (or [press F11 on the keyboard](#)).

3. System will detect cards and read the total number automatically, and

the corresponding number buttons will be displayed dynamically.

#### 4. Recording status:



a. This icon means the system is recording normally.



b. This icon means the system is recording manually.



c. This icon means the system is recording in motion detection.



d. This icon means the system is recording in sensor detection.

## 1.2.2 Screen menu

Press TAB key or Page UP (select next camera window) and Page Down (select previous camera window) key on keyboard to select one live camera window.

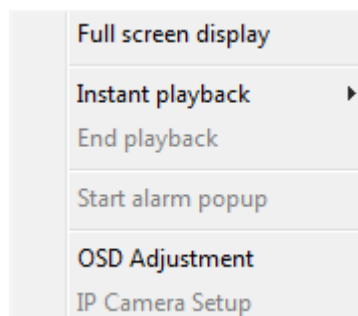
### 1. Full screen

Single-Right- Click image area, it will popup a menu, then select “full screen” to change display mode to full screen (or [press F12 on the keyboard](#)). When you want to resume origin mode, you should Single-Right- Click image area and select “Restore display”.

### 2. Instant playback

Single-Right-Click desired camera window and select “Instant playback” (except IP Camera, it can just play back instantly in the window that is not used). After that, choose a time from the submenu, and then system will play back video data of current camera in current window according to your selection (E.g.: you select 1min, system will play back previous 1 minute video data of current camera in current window). Also, you can play back video data of one current live camera in a window that is not used by any cameras (always black background with no “Video Loss” information, IP Camera can only play back instantly in those windows): Select a window, and then Single-Right-Click it to select “Instant playback”. Finally, choose a time and the camera you want to playback, and then system will play back video data in current window according to your selection.

The window that is playing back video data will indicate a yellow border to be different from the live windows.



10 sec
30 sec
1 min
3 min
5 min
8 min

In the course of the instant playback, you can press **Space** key to switch the **play/pause** status or direction key **→** and **←** to play next and previous frame.

If you want to stop the instant playback, you can Single-Right-Click the play backing window, and select **End playback**.

While instant playback is in processing, if you want to play it again, you can select **Review playback** function. You can press Space key to switch the play/pause status or direction. In pause status, you can press key **→** and **←** to play next and previous frame. when the screen plays, you can press **↑** and **↓** to control the speed of playing, also, in play status you can press **→** and **←** to play in normal speed and play it again.

### 3. Alarm popup

Single-Right-Click video image area in main interface and select “Start alarm popup” after you [set “Alarm camera popup interval” in system setup](#), otherwise, it can’t be selected with gray. After that when there has a motion detection alarm ([set in PTZ & Linkage setup](#) and [Motion detection setup](#)) or an alarm triggered by sensor ([set in Sensor setup](#)), system will display alarm cameras in sequence. But this function does not include IP camera, even IP camera have alarms, there images will not pop up. When you want to end this function, you can Single-Right-Click video image area and select “Pause alarm popup”.

### 4. OSD Adjustment

Single-Right-Click video image area in main interface and select “OSD Adjustment” to adjust the position of OSD (IP Camera does not have this function; you can set the OSD position in IP Camera setup remotely).



OSD includes time and channel name. In this screen you can press time or channel name and drag them to where you want directly, after that you can press **SAVE** button to save and press **Resume** button to resume time and channel name to default position.

## 5. IP Camera setup

For this function, it is only available when you Right-single-Click image of IP camera.

It will describe in details in IP Camera Setup.

### 1.2.3 Interface description

#### 1. Partition mode




Press **DISPLAY** button to set the window's partition mode of the main screen. There are many types partition; the available partition is determined by the total channels of card, you can select the suitable partition according to the number of video inputs, the partition number which is bigger than total channel is not available with gray.




1 View  
4 View  
9 View  
13 View  
16 View  
20 View  
25 View  
28 View  
33 View  
36 View  
40 View  
49 View  
64 View


## 2. Videos-play-in-sequence mode switch

Press  button to switch between playing all cameras in current windows in sequence and not when the current partition number is smaller than the total channels of card.


## 3. Emergency recording button

Press  button to trigger recording of all cameras for 30 seconds even if they have been set to record by any other modes. This function is useful to deal with emergency where quick response is required.

## 4. Image capture

Press  button to save a still image of selected camera to local hard disk for reviewing or print.

## 5. Manual record switch

Press  button to record manually and press it again to stop manual recording for selected camera.

## 6. Information display panel



Thu, Apr 24, 2008  
PM03:10:55  
Camera 31  
Disk Usage: 44%

This panel shows day of the week, current date, current time, total free

hard disk space, current record disk and description of selected camera.

## 7. Local setup submenu



Press **SETUP** button to enter [Local setup](#) submenu.

## 8. Playback submenu



Press **PLAYBACK** button to enter [Playback](#) submenu to search local video/audio data.

## 9. Remote chatting

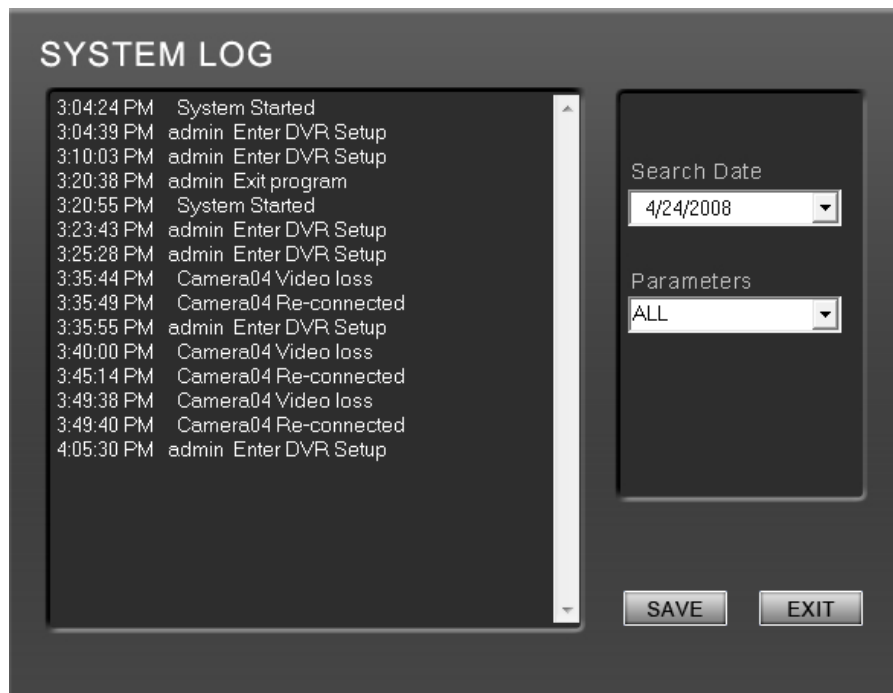


Press **CHAT** button to connect a remote Client or Server for a live chatting via IP address, but first, you should be sure you have installed audio card and Microphone in each PC.

## 10. System log



Press **VIEW LOG** button to view all actions of recording as well as operations. System log keeps a record of system events such as program startup and shutdown, changing camera setup and all operator or system daily activities according to time and date. Users can look log by date and system parameters. System parameter includes operations, system prompts, alarms and other activities.

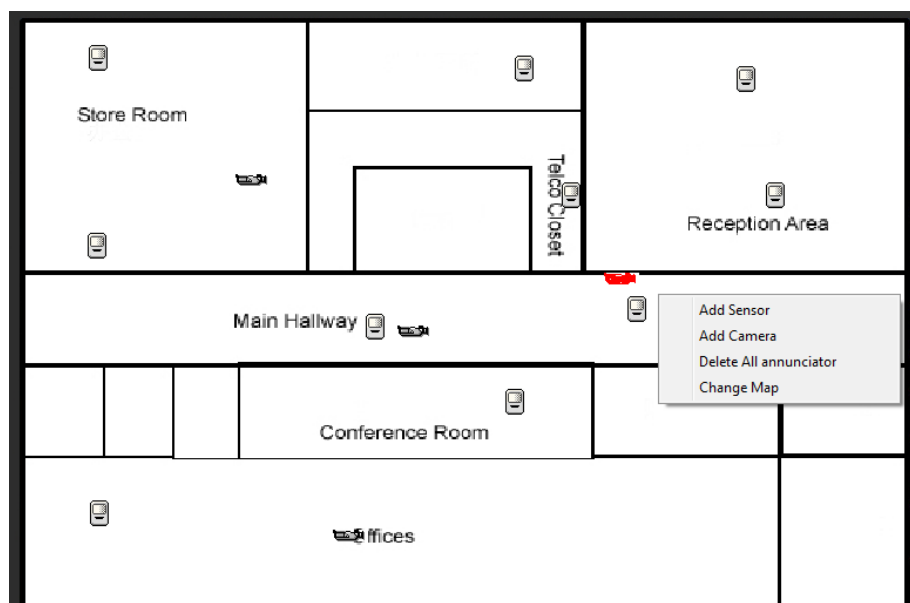


## 11. E-map



Press **E-MAP** button to set E-map,

Click **SETUP** icon and then Right-Single-Click on the map, the setting picture will appear. You can add or delete sensors and cameras that pointed by the arrow or change the digital map.



If it is set to appear automatically, when the sensor is triggered, the map will appear automatically and the sensor being triggered will be marked. For

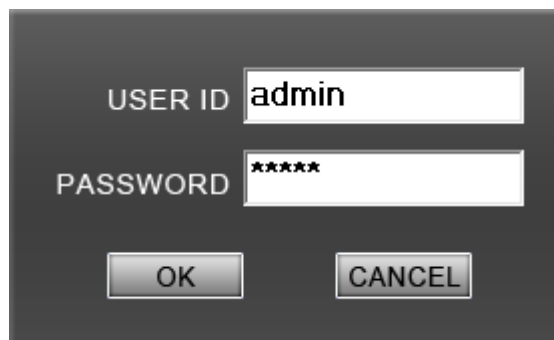
triggered camera, user can Left-Double-Click it to view its video.

## 12. System lock



Press **LOCK** button to prevent unauthorized user to operate system.

Press this button again; the unlock dialog box will be displayed. Input your User ID and password then press OK to unlock it.



Default User ID is “admin”, no password.

**Note:** If the DVR system is not configured as User Manage Mode, the lock button will be unusable and allow any client’s access (even in client program, user name and password will be useless)

## 13. Minimize button



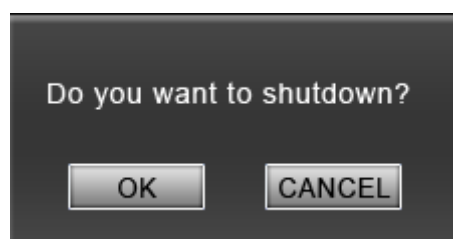
Press **Minimize** button to minimize the main window (or press WIN + Z on keyboard).

## 14. Exit program



Press **Exit** button to exit program.

After clicking this button, a dialog will display. Click “OK” to quit DVR system.



## 1.2.4 System Menu

Backup System Parameters
Import System Parameters
DVD/CD disc backup directly
Execute a external program
Write to working log
Open explorer
Open Screen Keyboard
Playback to TV monitor
DVR board work mode setup
Keyboard shortcuts setup
Add/Del IP Camera
POS Function Setup
ACU Function Setup
POS/ACU Event Monitor
POS/ACU Text Search

### 1. Backup System Parameters

Select this function to export system configurations.

### 2. Import System Parameters

Select this function to import system configurations.

### 3. DVD/CD Disc backup directly

Select this function to burn video data to DVD or CD, it is same to burn DVD/CD function in [Playback](#).

### 4. Execute a external program

Select this function to execute a external program

### 5. Write working log

This is useful to record events that occur during the operator's shift.

### 6. Open Explorer

When keyboard is locked, Users can operate window resource via explorer.

### 7. Open Screen Keyboard

This function allow user to use soft keyboard, you can press this bar to

open the screen keyboard. Also, in the setup interface you can Left-Double-Click the blank to open this keyboard. User can close this keyboard manually.

## 8. Play back to Tv Monitor

In DVR system, the recording data can be transmitted to TV monitor via Matrix card

## 9. DVR board work mode setup

Each DVR system supports maximum 8 PCs 400XHC (total channel is equal to 64) series board, so user can set its work mode via this GUI.

Board Work Mode Setup	
4016HC	16 X CIF
4016HC	16 X CIF
4016HC	16 X CIF

SAVE CANCEL

For 4004HC, 4008HC, 4016HC series board model, you can set its work mode. The new DVR board work mode will take effect after rebooting DVR Server software.



When system run “Playback to TV Wall” process, the Matrix card will output recording data. If this process does not run, matrix decode card will output real-time video according to your [matrix board setup](#). Otherwise, when you use matrix card to decode video data from IP Camera, you can’t use this function to play back recording video data to TV Monitor but only output real-time video of local board and IP Camera to TV Wall according to you setting in [Matrix setup](#). In this process, you can play back record file by date and camera, and the record file will be played automatically.

## 10. Keyboard Shortcuts setup

If you don’t want to use certain shortcut keys, you can disable the shortcut functions and save the setup.




## 11. IP Camera Device List

Press this bar to add IP Module to DVR system. For resource limitation, you can add max 16 IP Modules, including DVS and EM DVR, but every device can only add four channels to DVR system.

[illegible]

### (1). Add IP camera device

Press  button to add an IP Camera device:

**Add/Modify IP Camera**

Server Name	<input type="text" value="192.168.0.102"/>	NetVision IP	<input type="button" value="v"/>
IP Address	<input type="text" value="192.168.0.102"/>	Main-Stream	<input type="button" value="v"/>
Connect Port	<input type="text" value="8000"/>	IF Use DNS to Get IP	<input type="button" value="No"/> <input type="button" value="v"/>
Login User ID	<input type="text" value="admin"/>	DNS Server IP	<input type="text"/>
Login Pass	<input type="password" value="*****"/>	DNS Server Port	<input type="text" value="7071"/>

**Figure2— 1**

**【Server Name】** Set a name for the new IP camera device.

**【IP Address】** Input the address of the IP Camera, it is an IP address or IP alias of an IP camera which is connected through DNS Server.

**【Connect Port】** Set the port through which connects to IP Camera.

【Login user ID/Login Pass】 When the user want to visit IP Camera and the server has used the function of rights management, login user ID and password will be checked. If the user has no right to visit that camera, the connection will be cut down automatically.

【Data Stream type】 Select the Main-stream or sub-stream for the device, the main-stream and sub-stream could set in the follow interface:

The screenshot displays the 'Alarm Setup' tab for 'Camera 01'. The 'Camera' dropdown is set to '1'. The 'Stream Type' is set to 'MasStream' with a 'FrameRate' of '20' and 'Resolution' of '2CIF'. The 'SubStream' option is also visible with 'Image' set to 'Best', 'Bit Rate Type' set to 'VBR', and 'Max Bit Rate' set to '1024k'. The 'OSD' section includes checkboxes for 'Show OSD', 'Show Week', and 'Show Logo', along with 'Position X' and 'Y' coordinates. The 'Record schedule' section includes 'Enable Rec', 'All Day', 'Rec Day' (Mon.), 'Rec Type' (Motion detect), and four recording periods (Period1 to Period4) with their respective start/end times and recording types. A 'Copy to' button and 'PostRec'/'PreRe' settings are also present.

【If use DNS to get IP】 Select whether use DNS to get IP or not, if the server end is the dynamic IP address, users need use DNS to get the server's IP.

【DNS Server IP】 Set IP address of DNS server host.

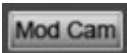
【DNS Server Port】 DNS server host's port, which is provide to connect DNS software.

When you finished adding IP Camera to DVR system, it will show the status of that camera, including Sever name, IP Address, connect port, sequence number for IP Camera, connect status and register information.


**Note:**

1. Currently our DVR server can maximums add 16 channels IP cameras. For each device, system allows to connect maximum 4 cameras.
2. After you add IP cameras to DVR system, they will be collocated sequence numbers after local board cards. The sequence numbers of the IP camera change dynamically according to the total numbers of local board cards and the sequences of the IP cameras to be added. For example, if there have 32 channels local board card, then you adds 2 IP cameras, they will be collocated 33 and 34 as their sequence number. Then if you add another board card (4 channels), the sequence number of them will change to 37 and 38 dynamically.

## (2). Modify IP camera

Press  button to modify IP camera's information, its interface is same as Add IP Camera.

## (3). Delete IP camera device

Press  button to delete connected server. When system is in processing to add IP camera device ("connecting..." indicated in connect status column), user can not delete that IP camera device.

## (4). Decode card work mode

DVR system support playing video of IP Camera to TV wall directly, then it uses the hard decoding function of decoder, so you should set the work mode of decoder. If you don't use hard decoding, you can't output video of IP Camera real-time, user can only play back recording data to TV monitor by selecting [Playback to TV Wall](#) function.

Note:

Each NV4002MD card can decode 2 channels D1 or 4channels CIF.

Each NV4004MD card can decode 4 channels D1 or 8 channels CIF.


When you select the work mode, system will send out corresponding channels of IP camera from the first IP camera. It will not influence soft decoding for cameras of local board cards. If you enable hard decoding, then all the images of cameras will be displayed in overlay model, adversely, all the image of cameras will be displayed in off screen model.

## 12. Pos Function\Monitor\Text Search

We will introduce the Pos particularil in [1.3 Pos introduction and function](#)

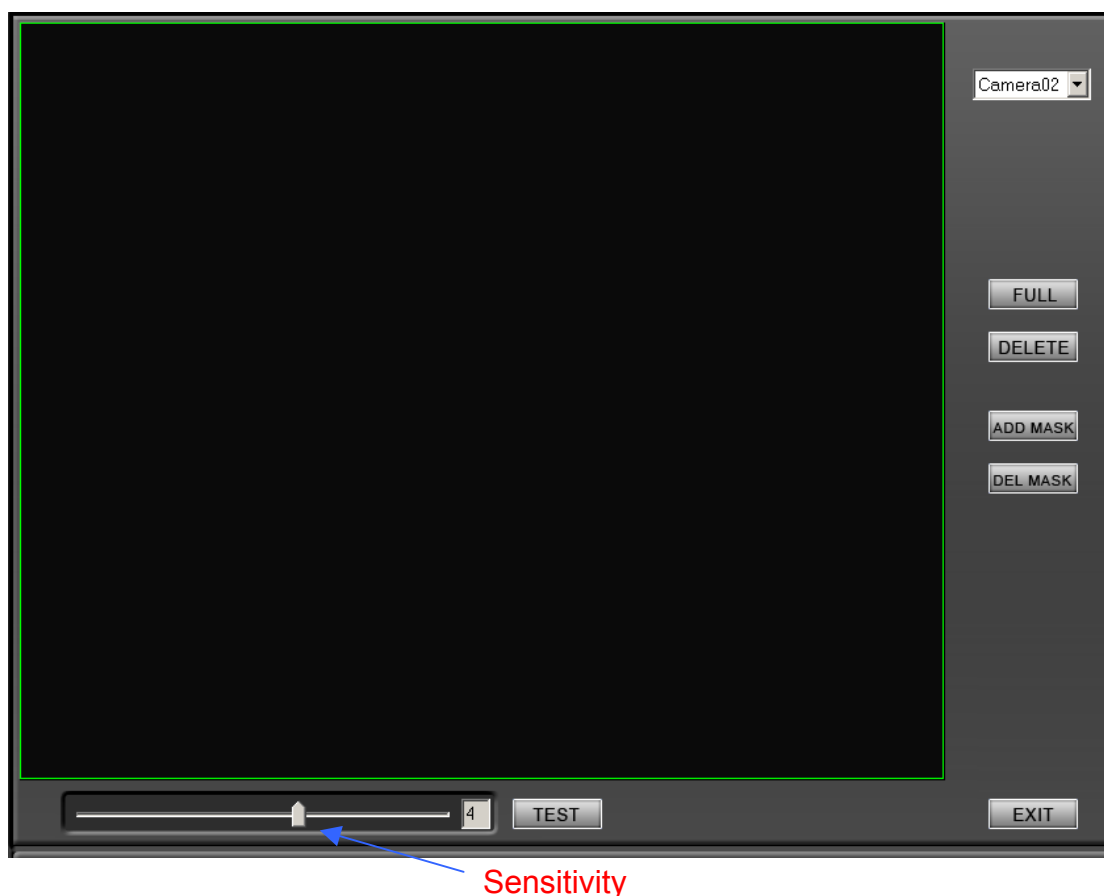
### 1.2.5 Motion detection area & Cover setup

Press  button to set motion detection area.

By default, the entire screen is set as motion detection area where is indicated with green border around the image. To mask a specific area, you can click  button to cancel the full screen detection border; then Left-Single-Click and drag a rectangle. A green rectangle will mark the area of it. Also, you can set any other areas. Any activities in the motion detection areas will trigger recording, depending on the reaction mode; and alarms may be generated along with electronic map icons flashing in alert mode. Click

**TEST** button to test the sensitivity of motion detection. The sensitivity can be adjusted by dragging the slider bars below the motion detection window,

Notice: motion sensitivity value will affect the accuracy of [smart search](#)



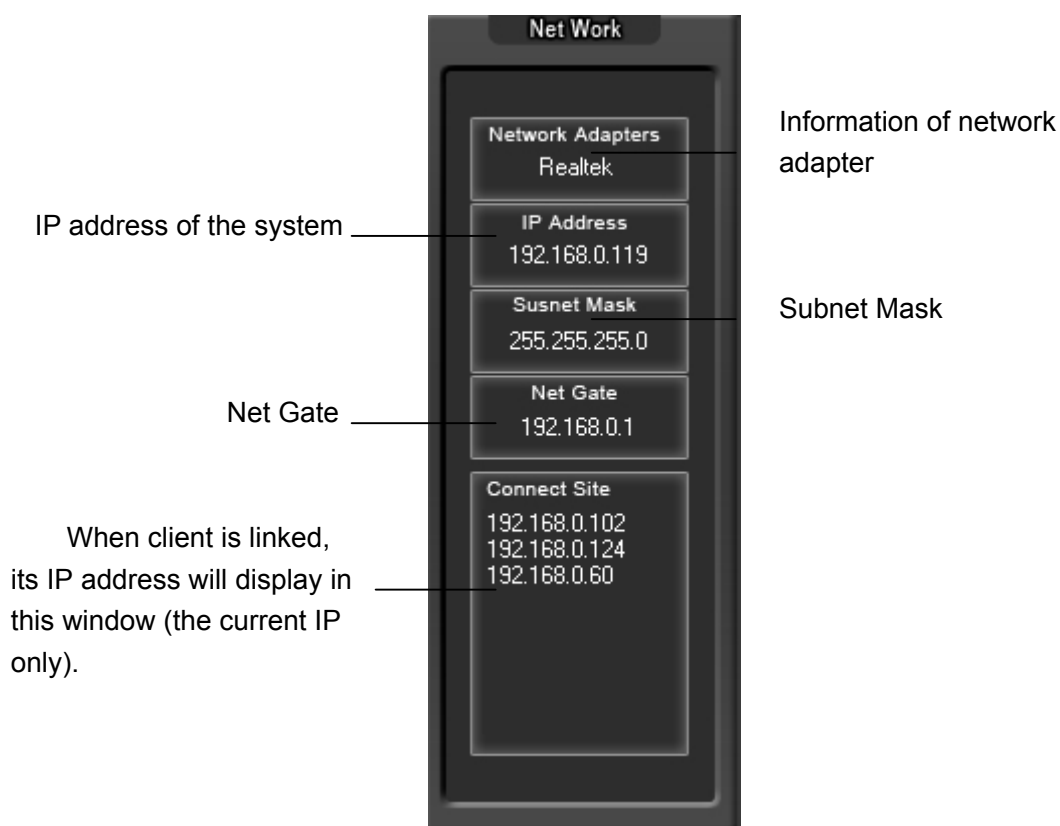
## 1. Add mask / Delete mask

Press **ADD MASK** button to set the area to be shielded. If there are some areas that you don't want to show, you can draw those areas with mouse till they change to be black. You can set several cover areas. Press this button again to finish adding

Press **DEL MASK** button to delete all cover areas.

### 1.2.6 Network panel

This panel displays the network configuration of DVR system.



## 1.2.7 PTZ Control panel

In DVR system, it has three ways to operate PTZ;

- Panel operate;
- Operate in video area directly ;
- Keyboard operate



## 1. PTZ speed

Press and drag the slider bar to adjust the speed of PTZ.

## 2. Relay (On/Off)

Control the PTZ cameras internal relay (relay1) or the decoder's relay (relay 1). Used to turn on a light or control an access gate.

## 3. Wiper (On/Off)

If using the PTZ cameras corresponding wiper control relay, this toggles the relay/wiper on and off.

## 4. Zoom + / Zoom –

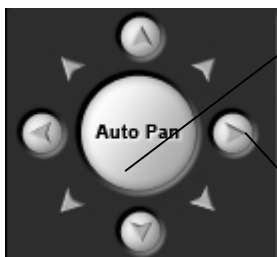
Controls the zoom function of the PTZ camera.

## 5. Focus + / Focus –

Overrides the auto-focus setup of the PTZ camera, adjust focus the image.

## 6. Iris + / Iris –


Overrides the PTZ cameras auto-iris and brighten or darken the image.

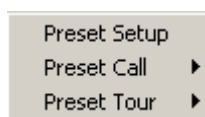


Pressing this button initiates the connected PTZ camera to do an automatic tour of 360, but for speed dome, many PTZ factory forbid this command.

By pressing and holding these buttons, the PTZ camera will move up, down, right and left as well as other directions.

## 7. Speed Dome

Press  button to operate the speed dome, including Preset Setup, Preset Call and Preset Tour:



### (1). Preset Setup

In this screen you can set the preset position:

Camera ID: Camera02

Add/Del. Preset

Preset Name: we

Preset No.: 1

Call Mode: Call Preset

+ - SET

Preset Name	NO.
we	1

No PTZ action: 15 sec back

Home Position: we

Tour Preset: TourGroup1

Preset Name: we

+ - Stay Time: 5 sec

Preset Name	NO.	Time
we	1	5

SAVE EXIT

### Add/Delete preset

In this section you can set the preset name with its sequence number, then you can press **+** / **-** button to add/delete a preset, when you want to modify the preset you can press **SET** button to confirm your modification. For different cameras, they have different commands to open and set, so you can choose the call mode in the drop-list for different cameras.

### Home position

You can set a home position for the PTZ. When there have no PTZ actions after the setting time system will call the PTZ to the home position.

## Tour preset

In this section you can set the tour schedule. First you can choose a group, and then set the track for this schedule; you can press **+**/**-** button to add/delete a preset to it. After you choose the preset name you can set the time to keep on.

### (2). Preset call

When you select this function, system will show all the preset names you set in Preset Setup menu; you can click one to move to it.

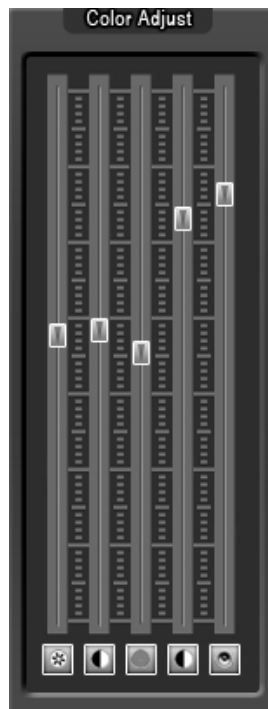
### (3). Preset Tour


When you select this function, system will show the entire tour groups you set in Preset Setup menu; you can click one to execute it.


## 8. Control PTZ via video window


Pressing and dragging the mouse to the corresponding area can control the PTZ.


### 1.2.8 Color and Audio adjustment





① Press the first button and drag to adjust the brightness of the image that you selected, and you can resume its default value by pressing .

② Press the second button and drag it to adjust the contrast of the image that you selected and you can resume its default value by pressing .

③ Press the third button and drag it to adjust the hue of the image that you selected, and you can resume its default value by pressing .

④ Press the fourth button and drag it to adjust the saturation of the image that you selected, and you can resume its default value by pressing .

⑤ Press the fifth button to switch sound of the audio that related to the image you selected and drag the bar to adjust the volume, and you can resume its default value by pressing .

**Copy Color To:** By pressing the  button to copy the color and audio adjustment in this camera to the other.

## 1.2.9 Matrix & display

This panel includes matrix group and display group. Each group includes 16 numeric buttons; each button denotes one type of matrix or display. This will describe in [System setup](#).

## 1.2.10 DI/DO Control





### 1. DI control

Press number button to check sensor all time forcibly even though user didn't set check sensor in [sensor setup](#). The channel of DI and DO is

determined by the setup of DI/DO device you set in [System setup](#). The status of DI has three types:

 Input channel 3 doesn't check sensor forcibly.

 Input channel 2 checks sensor forcibly.


 Input channel 1 has an alarm inputting


When there has no alarm yet, user can press number button to check sensor forcibly. Press the button again to stop to check all time, then system check sensor according to [Sensor setup](#). When there has an alarm, the corresponding button will show the alarm with green.

**Note:** When you select NV 7632 and the combination is not the standard configuration (combination of NV 7608 and NV 7616 or NV 7608 : total DI is less than 32), some ports are not available according to the setting of decoder address. For example: user selects NV 7632 and the combination is NV 7608 (decoder address is 1) and NV 7616 (decoder address is 2), then the DI port 9 to 16 is not available, the status indication is not available.

## 2. DO control

Press number to open/close alarm device relay switch manually. The status of DO has two types:

 Output channel 2 is close.

 Output channel 1 is open.

When there has no alarms triggered out, user can press the number button to output alarm forcibly and the button will show it with green, press it again the output will be closed.

## 1.3 Pos introduction and function

### 1.3.1 Introductions

POS-DVR surveillance system is a professional surveillance integrated with POS system. While connection between POS and DVR system by NC-series connector, the DVR surveillance system can turn into a POS-DVR surveillance system. By bringing video and POS transaction data together, the POS-DVR surveillance system provides visual text information to reduce shrinkage and prevent asset from losing.

### 1.3.2 Main features

Besides the basic functions of DVR system, POS-DVR surveillance

system has following specific functions:

**POS Text Overlay with Video:** Display/hide transaction text messages on screen (video files) to supervise every transaction real-time; customize text preset positions and font.

**Quick Search:** Single video search and playback with transaction data.

**Text Events Search:** Use pre-defined transaction criteria to search in a field filter displaying the results in a newly created System Log, e.g. all the transactions containing the keyword "coke" will be screened out. Also you can press the text to preview corresponding video image.

**Events Monitor:** Store all transaction data in Microsoft Access format for retroactive analysis.

### 1.3.3 Connection

Up to 64 POS devices can be integrated with POS-DVR system, include COM connections (Maximum 32 devices) and TCP connections (Maximum 32 devices).

### 1.3.4 Pos function

## 1. DEVICE SETUP

Firstly, you must access **System Setup** to enable "POS Function".


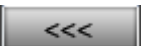
SYSTEM SETUP			
Number of Channels	8	Sensor Inputs(DI)	8
Audio Monitoring	Disable	Use E-Map	Enable
DI/DO Port	COM2	System Keystroke	Allow
DI/DO Device	NV7608	Date Format	Sat Jan 22, 2005
Alarm Beep	Enable	Time Format	PM 03:12:18
Pos Function	Enable	Sensor outputs(DO)	8
		Camera Sequencing Interval	2 Sec
		Save Log For	30 Days
		Alarm Camera popup Interval	Sec
		Default Camera Type	NTSC

NETWORK SETUP			
Remote Connection	Enable	Remote Port	5100
PDA Connection	Enable	PDA Connect Port	5101
Automatic Alarm Notification Client IP		Alarm Send Port	5300
Use DNS	Disable	Local Host Name	
DNS Server IP		DNS Connection Port	7100
		Remote Buffer Priority	smooth
		Web Server Port	80
		Permit Max Connect Video Num	128
		Interval Connection Time	120 sec

BOOT SETUP			
<input checked="" type="radio"/> Exit to Windows	<input type="radio"/> Exit and Shutdown	<input type="radio"/> Auto Shutdown	0 H 0 M
Auto Reboot Date(Mon - Sun) 1 2 3 4 5 6 7		Reboot at	0 H 0 M

Register POS to the Map by pressing  button. Move it to the opposite direction by pressing . If the device is not listed, click on new and rename it to add it to the Map. The information one new device can be changed on the next section.



ordered the device list by the Alphabetical.



the default order of the device list.

## 2.DATA SETUP

**DATA FILTER SETUP**

Device: HiPOS

Line
Trans
Include
Exclude
Invalid
Replace
Event
Addition

Type	Position	Offset	Operation	Length	Data

Priority: 1

Type: Hex:
 Opera: =
 Len: 0

Pos: Non:
 Offset: 0
 Data:  

New
Delete

Set rules to analyze data from a device that is in 'Map' list. Rules will be applied ascending order, and the priority of Line and Addition rules are not adjustable.

followings are instruction for each section. Set a rule for separating each line. Click 'NEW' on Line Break section to add the line rule to shown on the up table. Select the exits line rule and change it to the interface for Update or Delete.

**DATA FILTER SETUP**

Device: Comcash POS system

Line
Trans
Include
Exclude
Invalid
Replace
Event
Addition

Type	Position	Offset	Operation	Length	Data
Hexa	End	0	=	0	0A

Priority: 1

Type: Hex:
 Opera: =
 Len: 0

Pos: End
 Offset: 0
 Data: 0A

Update
Delete

**Type:** Choose a type of data. Data types must be either 'Hexa' or 'Ascii'.

**Position:** Select a position to search the data string (ex. Start to search from begging)

**Operation:** Select an operator to be used when comparing 'Data' with data from POS.

**Data:** Set Data that will trigger the operation.

**DATA FILTER SETUP**

Device: Comcash POS system

Line **Trans** Include Exclude Invalid Replace Event Addition

Type	Position	Offset	Operation	Length	Data
Ascii	End	0	=	0	Thank You

Priority: 2

Type: Asci      Opera: =      Len: 0

Pos: End      Offset: 0      Data: Thank You

Update      Delete

Set a rule for separating each Transaction. Editing procedure is same as Line break

**DATA FILTER SETUP**

Device: Comcash POS system

Line Trans **Include** Exclude Invalid Replace Event Addition

Type	Position	Offset	Operation	Length	Data
Ascii	None	0	=	0	thank

Priority: 6

Type: Asci      Opera: =      Len: 0

Pos: None      Offset: 0      Data: thank

Update      Delete

Set a rule for a line with a string or character to be displayed.  
Editing procedure is same as Line break.

**DATA FILTER SETUP**

Device: Comcash POS system

Line Trans Include Exclude Invalid Replace Event Addition

Type	Position	Offset	Operation	Length	Data
Ascii	None	0	=	0	WELCOME
Ascii	None	0	=	0	TEXT SAMPLE

Priority: 5

Type: Ascii      Opera: =      Len: 0  
 Pos: None      Offset: 0      Data: WELCOME

Update Delete

Set a rule for a line with a string or character to be concealed. Editing procedure is same as Line break .

**NOTE:** If the setting rules are in conflict of the data ,the operation of the order by priority, the smaller of the value, the higher of the priority.

**DATA FILTER SETUP**

Device: Comcash POS system

Line Trans Include Exclude Invalid Replace Event Addition

Type	Position	Offset	Operation	Length	Data
Hexa	Start	0	=	0	18

Priority: 7

Type: Hex      Opera: =      Len: 0  
 Pos: Start      Offset: 0      Data: 18

Update Delete

Set a rule to discard a string or character. Editing procedure is same as Line break .

**DATA FILTER SETUP**

Device: Comcash POS system

Line Trans Include Exclude Invalid Replace Event Addition

Type	Old data	Type	New data
Ascii	THANK	Ascii	old

Priority: 3

Type: Asci      Type: Asci

Old: THANK      Data: old

Update Delete

Set a rule to replace a word or character to another.

**Data type:** Choose a type of data. Data types must be either 'Hexa' or 'Ascii'.

**Old data:** Enter data string that needs to be replaced.

**New data:** Enter a new data string that will take a place of the Old Data.

**DATA FILTER SETUP**

Device: Comcash POS system

Line Trans Include Exclude Invalid Replace Event Addition

Type	Data	Notify
Hexa	D0 AF	

Priority: 4

Type: Hex      Data: D0 AF

☒ Beep    ☒ Mark    ☒ Popup

Update Delete

Set a rule to trigger a beep, mark or popup event.

**Data type:** Choose a type of data. Data types must be either 'Hexa' or 'Ascii'.

**New data:** Enter a new data string that will take a place of the Old Data.

**DATA FILTER SETUP**

Device: **Comcash POS system**

Type	Position	Offset	Operation	Length	Data
Hexa	None	0	=	0	D0 AF AD 0F

Priority: **8**

Type: **Hex**      Opera: **=**      Len: **0**

Pos: **None**      Offset: **0**      Data: **D0 AF AD 0F**

Set a rule to add a string or character. Editing procedure is same as Line break.

All setting of the DATA SETUP will be expressed in pos monitor.

### 3.CONNECT SETUP

#### (1) Com Setup

Device: **HIPOS**

Name: **COM1**

Baud: **9600**

Stop: **1**

Data: **8**

Parity: **None**

Associated Cameras

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32

Available ports are listed in the left side.

If there are more External devices than available ports, COM port expansion

card required

Select the port where external device is connected.

Select Device.

Change the port setting to match up external device.

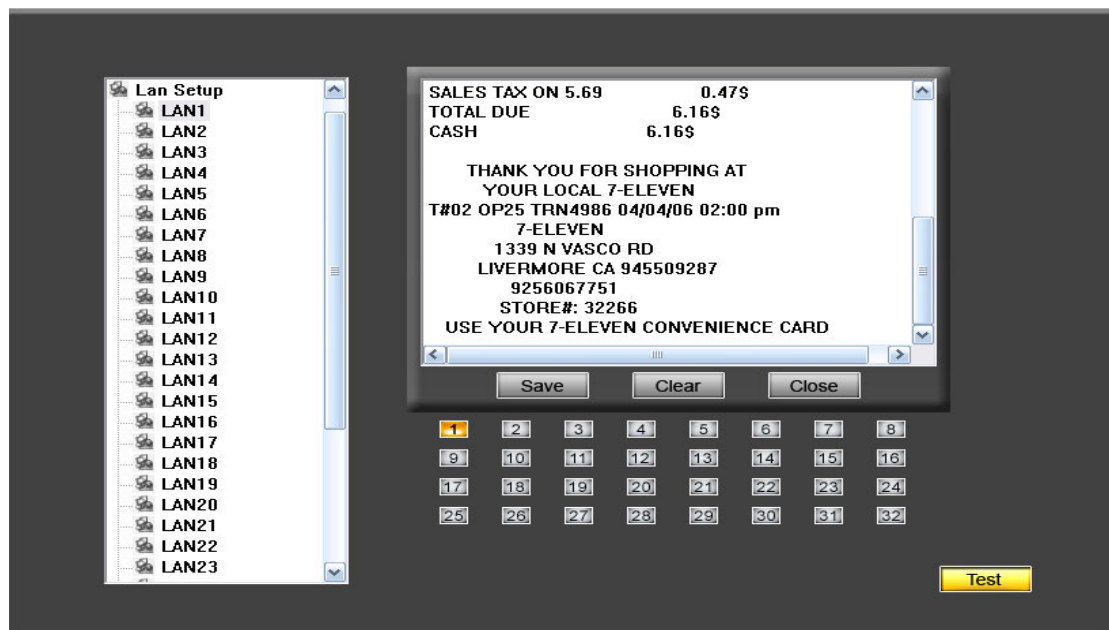
After setting, test the connectivity of external device by "Test".

if noting comes up in Test data capturing, Check the setting value and cable connection

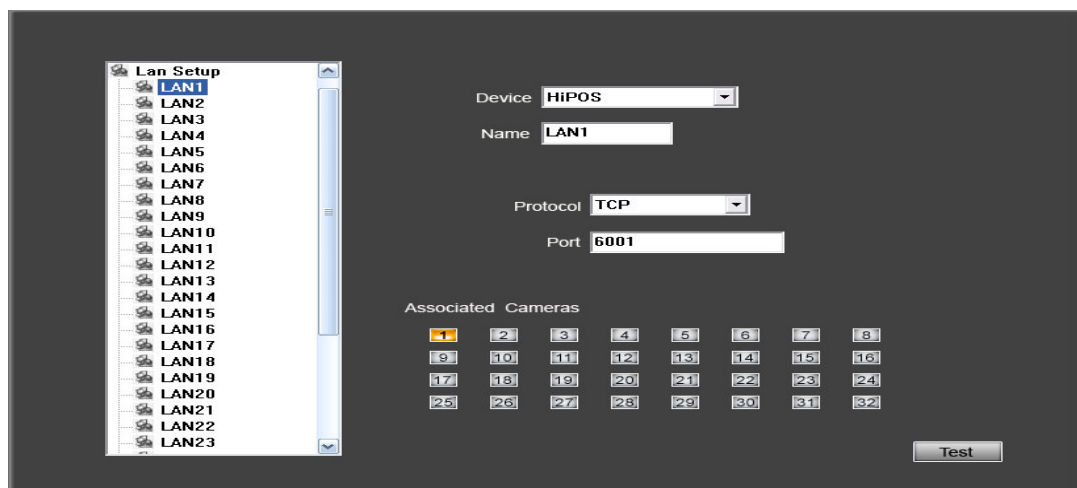
**4** not selected by any COM. **2** selected by current COM.

**1** selected by other COM.

In save status ,it will save and display the datas of the current device what you set in DATA if you pressing the Test button as below:



## (2) LAN Setup



Multiple external devices can be connected with single TCP/IP connection. Each device must be given a unique port number. Choose Lan from list first

Select Device.


Change port setting to match up the device.(support TCP or UDP)

Choose a camera(s) to display data from external device.

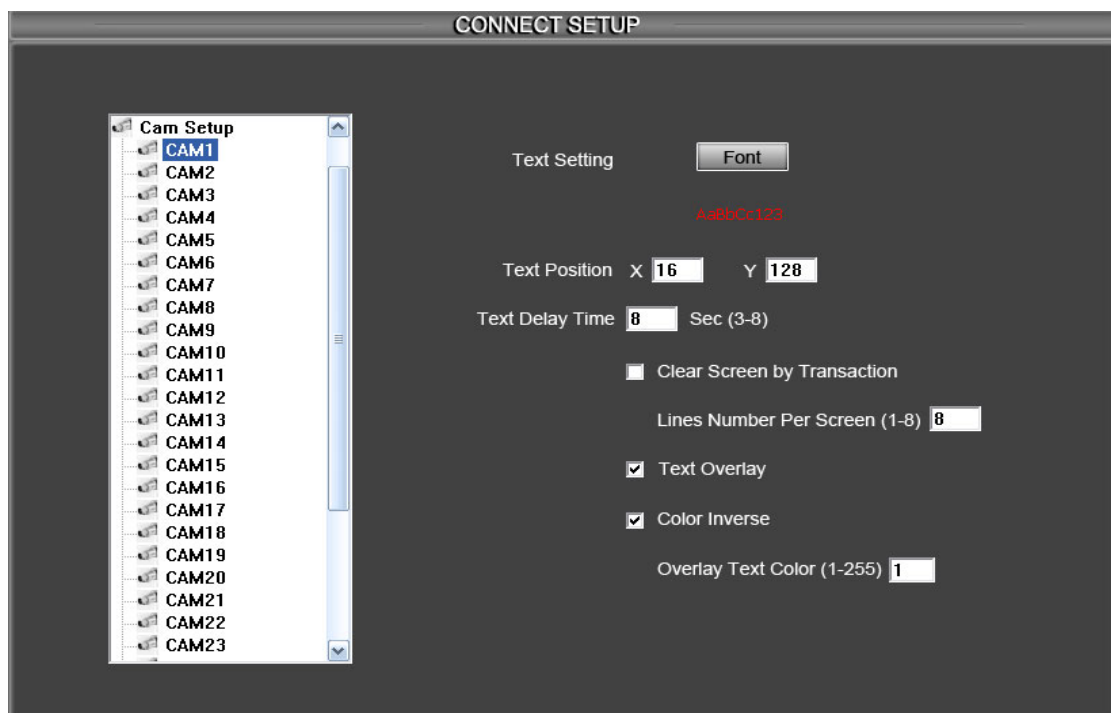
After setting, test the connectivity of external device by "Test data Capturing".

if noting comes up in Test data capturing, correct the port setting and cable connection.

 not selected by any Lan.  selected by current Lan.

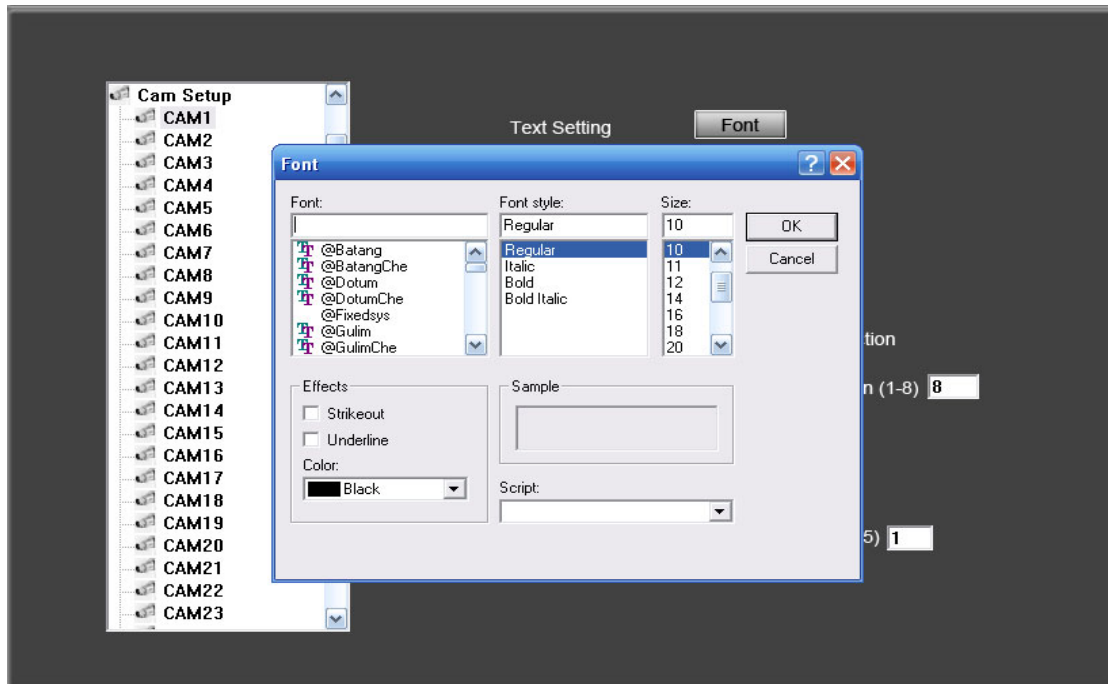
 selected by other Lan.

### (3) Cam Setup



Choose camera number:

**Font:** Click Browse and change font, size and color as below:



**Position:** Setup the position of text. Default is set to top of the screen. As number increases, text will be displayed farther from the top.

**Text delay time :** Set time (sec 3-8) for text to stay on screen.

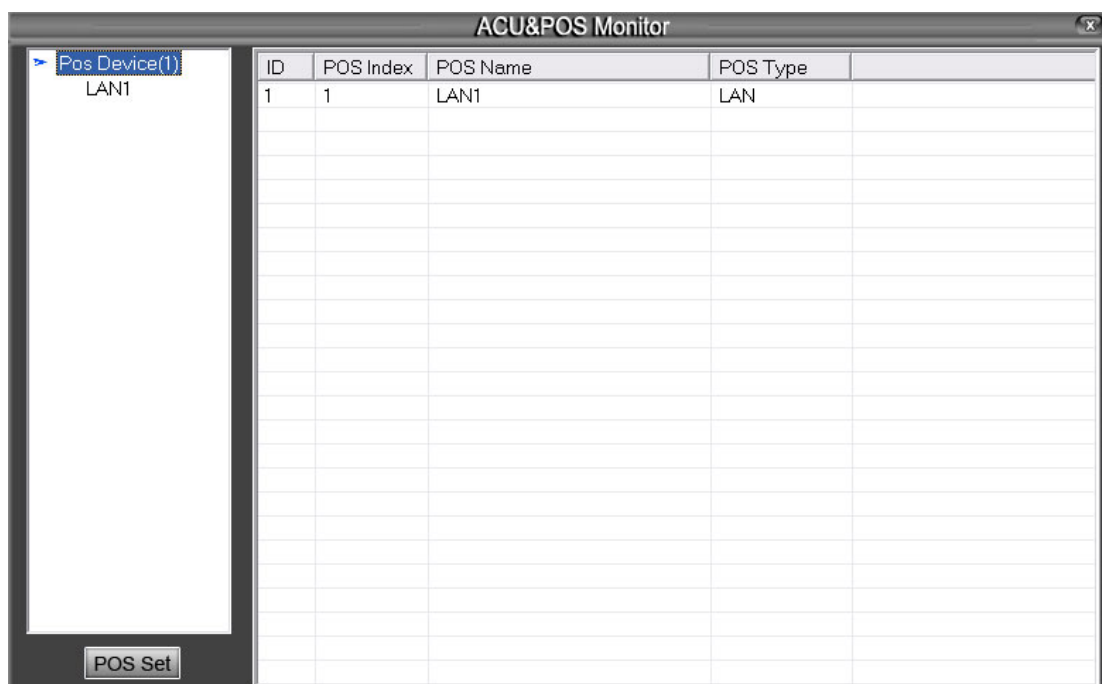
**Clear screen by transaction:** Keep display text until transaction break is delivered.

**Lines number per screen:** Set the desired lines(1-8) to display text. Disabled if “by transaction” is displayed.

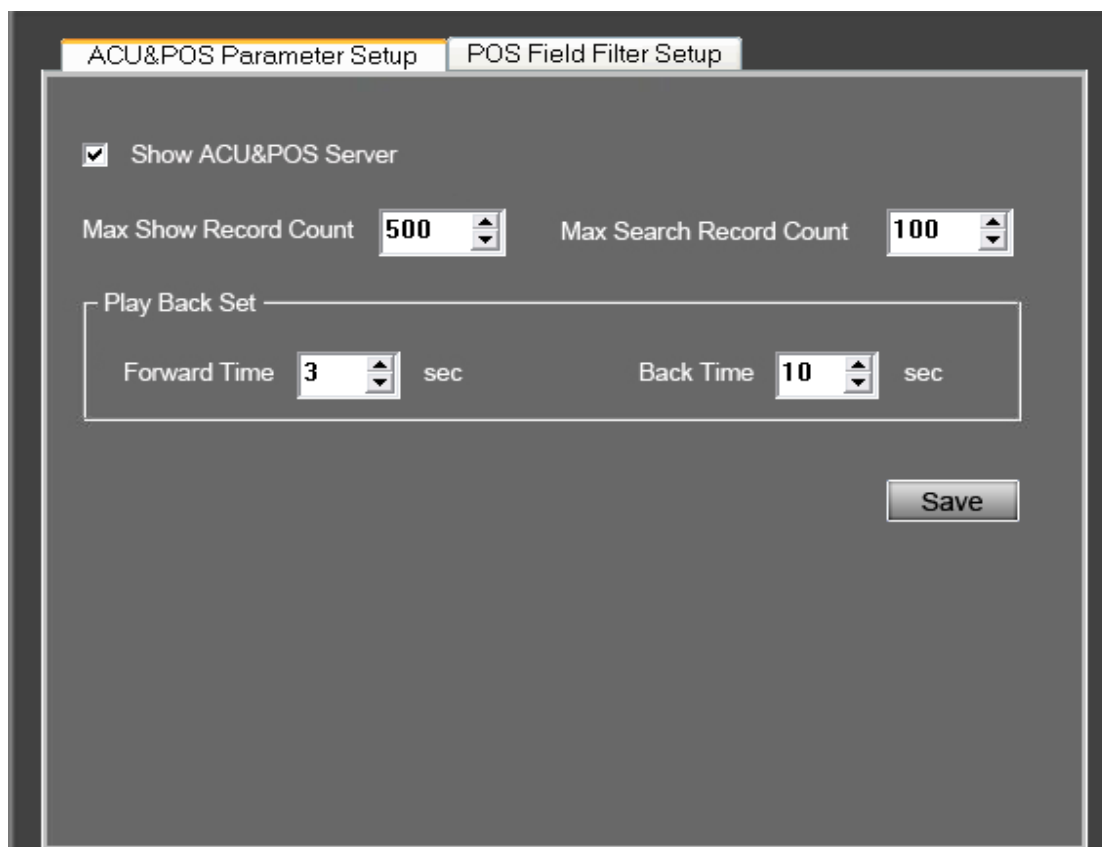
**Use overlay:** When checked, camera image and data from external device is compound together (depending on external device, main display in device can be compound as well). When unchecked, they are not compound together. However, It is still possible to verify the data and image together in the Search and remote access.

### 1.3.5 Pos Monitor

You can enter the pos monitor as below:



Select the POS which you want to set and press the Setup button.:



Max Show Record Count 500

The toolbar can set the POSRecord Count to display

Max Search Record Count **100**

The toolbar can set the the display rows perpage in the playback

ID	Key Word
1	7-ELEVEN
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	

Key Word: 7-ELEVEN

Color: ■ clRed

☐ Only Work Between

00:00:00 → 00:00:00

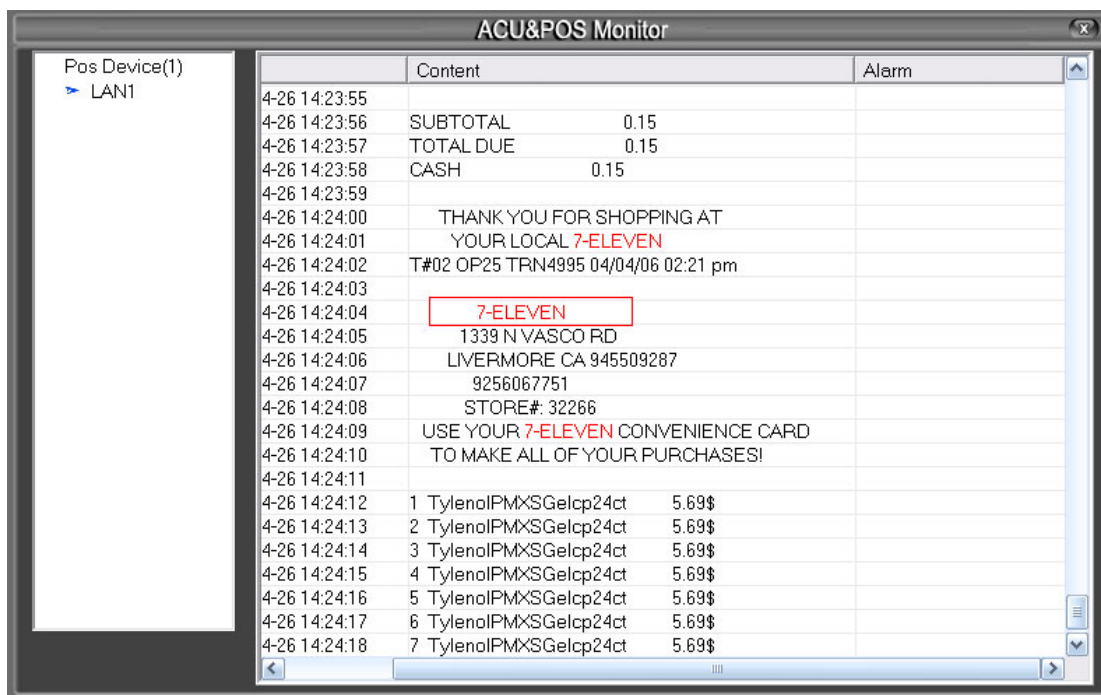
☐ Enable Alarm

☐ Alarm Output

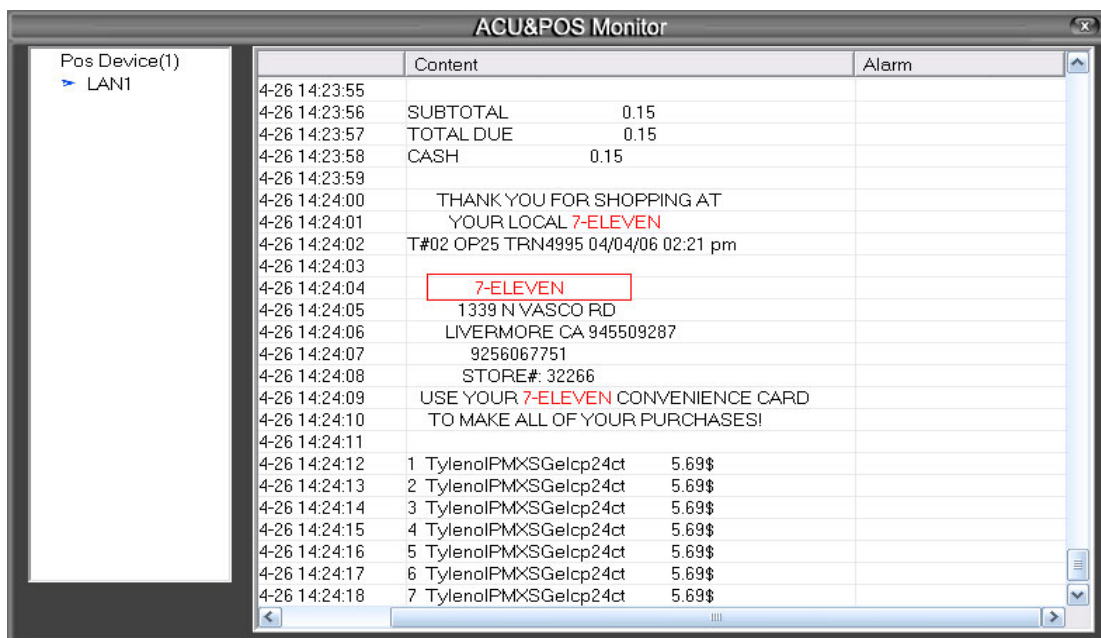
Alert Message

Save

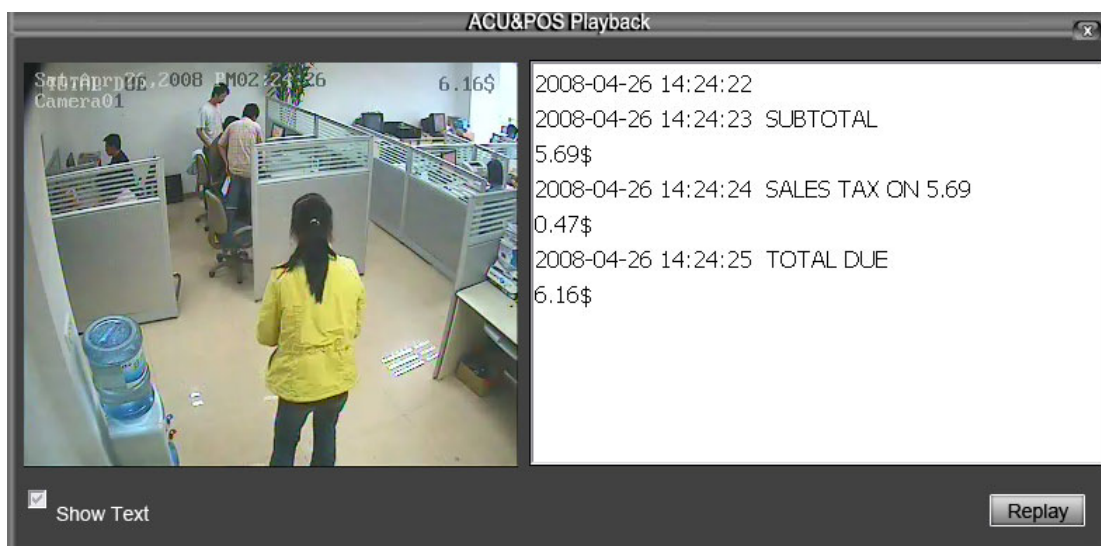
The diagram can set the POS Field Filter ,such as:the color of ELEVEN in the keyword is set clred and the work time between 2:00:00 and 23:59:59, if the ELEVEN appears in the periods,it will display in clred.the same as the Alarm Output



The toolbar can set the Play Back time between a period of time:



Select a count, and double-clicked, it will display:



It will display the period bases on the Forward time and Back time Compared to the time which the count is recorded.

**NOTE:**The WIN 2000 SP4 or the WIN XP SP2 should support the pos function , If below these operating system,you should download the MDAC 2.7 from the html:

<http://www.microsoft.com/downloads/details.aspx?displaylang=en&FamilyID=9ad000f2-cae7-493d-b0f3-ae36c570ade8>

## Chapter2 Local setup

The DVR System Configuration and Setup include 7 types configuration setup:



### 2.1 System setup

SYSTEM SETUP			
Number of Channels	32	Sensor Inputs(DI)	8
Audio Monitoring	Disable	Sensor outputs(DO)	8
D/I/O Port		Use E-Map	Disable
D/I/O Device	NY7608	System Keystroke	Allow
Alarm Beep	Disable	Camera Sequencing Interval	2 Sec
Pos Function	Enable	Save Log For	30 Days
		Alarm Camera popup Interval	
		Time Format	PM 03:12:18
		Default Camera Type	NTSC

NETWORK SETUP			
Remote Connection	Enable	Remote Port	5100
PDA Connection	Disable	PDA Connect Port	5101
Automatic Alarm Notification Client IP		Alarm Send Port	5300
Use DNS	Disable	Local Host Name	
DNS Server IP		DNS Connection Port	7100
		Interval Connection Time	120 sec
		Web Server Port	80
		Permit Max Connect Video Num	128
		Remote Buffer Priority	smooth

BOOT SETUP			
<input checked="" type="radio"/> Exit to Windows	<input type="radio"/> Exit and Shutdown	<input type="radio"/> Auto Shutdown	0 H 0 M
Auto Reboot Date(Mon - Sun)		Reboot at	
1 2 3 4 5 6 7		0 H 0 M	

#### 2.1.1 System setup

**【Number of Channels】** Display total channels of local board card, the number of IP Camera is not included. For IP Camera, you should set it

remotely in [IP Camera setup](#).

**【Sensor Input(DI)】** Display number of sensors (DI).

**【Sensor output(DO)】** Display the number of alarms(DO).

**【Audio Monitoring】** Select real-time monitoring audio or not.

**【Use E-Map】** Select use Electron Map or not.

**【Camera sequencing interval】** Set auto-split changing interval time.

**【DI/DO Port】** Select sensor/alarm driver connecting port, it must be different from PTZ Port. If you do not use alarm input, you can close this function. To avoid conflicts to the PTZ port, you should set and use the different ports for these two functions.

**【System Keystroke】** System keystroke. When it is enable, functions of some system keys will be disabled (Ctrl+Alt+Del included).

**【Save Log for() Days】** Log save days(max 100 days).

**【POS Function】** Set the pos function disable or not

**【Alarm camera popup interval】** Set the interval of alarm camera, if you select"—, you can't select function "[Start alarm popup](#)".

**【DI/DO Device】** Select receive alarm device type. When you change the type of alarm device, you should reboot the system to update the device information in [DI/DO control panel](#).

**Note:** Currently, system support following NV serials DI/DO devices: NV7608, NV7609, NV7616, NV7616B, NV7632 and NV7632B. NV7632 includes two NV7616 (or combination of NV 7608 and NV 7616), and NV7632B includes two NV7616B. When you select these two selections you must set their decoder address as 1 and 2, and they should connect with PC through RS 485 converter after they connect parallel with each other.

**【Date Format】** Select the way to display date. It decides the date display mode of DVR system, including the information panel on the main screen, the date panel of the playback window and OSD date in video.

**【Alarm Beep】** Select disable or enable from drop-down list. If select "enable", when there is an alarm, system will make beep voice.

**【Time Format】** Select time format from the drop-list. After you change the format it will affect the OSD format, information in information display panel and file lists.

**【Default Camera type】** Set the default mode of video from PAL and NTSC, it is available when the input video is lost and for the decoder to playback local video to TV Wall.

**【Grab picture save to 】** Select the path to save the grabbed pictures.

## 2.1.2 Network setup

**【Remote Connection】** Select using network or not. If select "disable", it will not permit any client connect this DVR system;

**【Remote Connect Port】** Select remote connection port for Clients.

**【Remote buffer Priority】** There are three items selected. " smooth"

demands the system have large buffer. " realtime " demands there have enough bandwidth. Otherwise, the data off and on when it is sent from the network.

**【PDA Connection】** Select whether allow [PDA](#) connect to DVR system. If select "disable", it will not permit any PDA device connect this DVR system.

Note:

To use PDA connection normally, the board card should support dual compression and user must set dual setting in local setup (can't set remote image same as recording).

**【PDA Connect Port】** Select remote connection port for PDA device.

**【Automatic Alarm Notification client IP】** Assign a network client to receive alarm message when there is an alarm. The alarm channel image will auto display in the client software. But user must be sure that client is running on that IP address.

\*Note:

Alarm auto connection to IP is used to input alarm automatically. When sensor, normal or motion record is set to input and there is IP address, the system will check if the client has connected with this system. If there is no connection, the system will try to connect with it through Port 5300(preset). While it cannot be connected, the system will keep trying till the connection is OK. So please ensure that your client's program is in use, Port 5300 is listening and the network is in good condition. If not so, the system will not be stable.

**【Alarm Send Port】** This is the alarm message connecting port, which is used to send alarm from DVR Server to Client.

**【Web Server Port】** The [IE client](#) connecting port. Default value is 80 for http access; but for some windows XP edition, it shields 80 port. In this case, user should modify this port to other port, such as 1280. After that, user must reboot DVR server, then user can access DVR server via IE Client like this: http://IP: 1280 (IP can be a static IP or dynamic domain name).

**【Use DNS】** Select use DNS or not, support dynamic IP.

**【Local Host Name】** Input the name description for DNS Server identification.

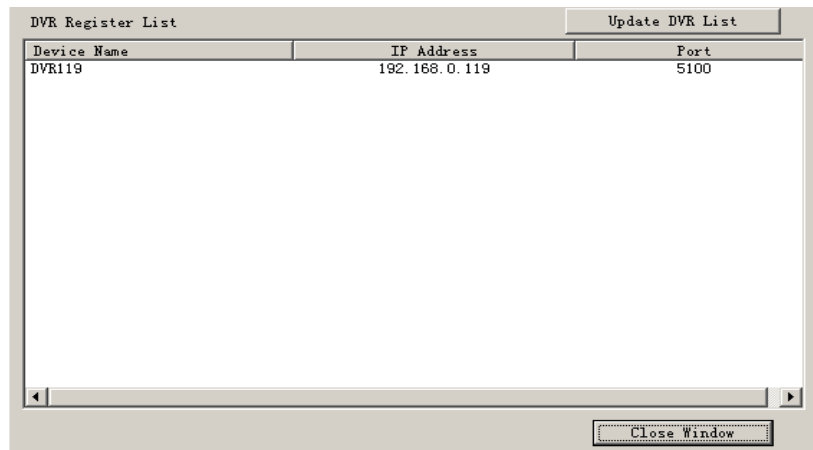
**【DNS Server IP】** DNS server host IP.

**【DNS Connection Port】** DNS server host port ,it is used to connect DNS server.

## DNS server work mode:

If it is require, please get DNS server software from developer.

1. If your DVR is dynamic IP, you should set your DVR system as follow:
2. DNS server will get domain name and current IP of your DVR, NVR Client can connect DVR server through this domain name.



3. NVR Clients get IP of DVR through DNS server according to its domain.

4. NVR Clients visit DVR through the IP that get from DNS server.

**【Interval Connection Time】** Set the interval time to connect DNS automatically.

**【Permit Max Connect Video Num】** The maximum number of video that permit to the client to connect the DVR server. The number can select according to the network bandwidth. The maximum is 256. For example: one DVR server own 2Mbit network bandwidth, if all video channel compress base on CIF resolution (max data bit rate is 500Kb). To get better video effect, we can set 4 as the permit max connect video number;

### 2.1.3 Boot setup

**【Exit to Windows】** User can exit program and back to windows desktop.

**【Exit and Shutdown】** User can exit program and shut down computer.

**【Auto Shut Down】** Set the time to shut down the computer .

**【Auto Reboot Date(Mon-Sun)】** Select auto reboot date.

**【Reboot at】** Set auto-reboot time.

## 2.2 Camera setup

**CAMERA SETUP**

Selected Camera: Camera01 Camera Description: Camera01

Camera Type: PAL Camera: Enable SubStream Frame(fps): 10

BitRate: Variable Frame Rate(fps): 25 SubStream Image Size: 176\*120

Image Quality: Very Good Alarm Adjust(fps): Disable SubStream Quality: Best

Image Size: 352\*288 OSD Date: YES Masking Bitmap File:

Record Days: Auto OSD Contrast: 255 Copy Setup to: ALL COPY

**GROUP SETUP**

Selected Group: Group01

Selected Cameras: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Pre-Event Record: 5 Sec Post Record Time: 5 Sec Record Audio: Video

Normal Record Sensor Record Motion Record Motion or Sensor Record Not Record

SUN MON TUE WED THU FRI SAT

### 2.2.1 Camera setup

**【Selected Camera】** To set the parameters for a camera, select the camera from the drop-down list. The cameras you can select are only the cameras of the local board card, IP Cameras are not included. For IP Camera, you should set it remotely in [IP Camera setup](#).

**【Camera Description】** Input the description for easy identification. OSD text can support any languages, it can put any language in camera description edit blank, and then press the button to set proper color (it does not support white) as below:

**TextOsdSet**

☒ Text OSD advanced setup

OSD Color (R G B value) 0 0 0

OK Cancel

note: Because of the width limit, you'd better input the characters within eight.

**【Camera Type】** Select camera type from drop-down list. Users can choose from PAL and NTSC.

**【Camera】** Enable or disable selected camera.

**【SubStream Frame Rate(fps)】** Set the frame rate of the SubStream. **【Bit Rate】** Set recording mode. Variable Bit Rate (VBR) or Constant Bit Rate (CBR) Recording.

**VBR** allows each frame to be recorded at a dynamic bit rate depending on the image complexity, activity and color.

**CBR** allows each frame to be recorded at fixed bit rate, regardless the scene activity. In many cases, this limits detail (resolution). The benefit of CBR is its ability to accurately estimate the total video capacity.

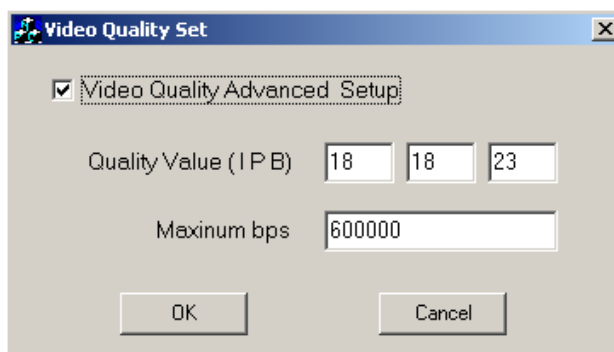
**【Frame Rate(fps)】** Set the recording rate for selected camera. For Frames per Second (fps), the frame rate should be from 1 to 30 fps. While image size is set "704\*576", the frame rate should be set around 1 to 15 frame.

**【SubStream Image size】** Select image resolution to the SubStream. When you set the **【Image Size】** as 4CIF(704\*576), this configuration is not available for HC series card, program will select it as 4CIF("Same as Record") automatically because DVR board does not support dual stream when it records with 4CIF resolution. When you want to use mobile client to access DVR Server, you must open dual compressing function by not selecting "same as record". When you open dual compressing function and the Mobile Client is online, whatever you select, the Clients, including NVR Client and Mobile Client, will just receive QCIF format image; when Mobile Client is offline, NVR Client will receive image as the format you set here.

**【Image Quality】** Sets the quality of the image to be recorded. Select from Poorest, Poor, Medium, Very good and Best .



Click this button to make advanced setup for video quality, you can set I B P frame and maximum bit rate.



(Note: If you don't familiar with those features, we advise you not to revise them)

Recommend setup:

For CIF:

Image	I frame	P frame	B frame	Max bps
Best	12	12	17	900000
Good	15	15	20	750000
Medium	18	18	23	600000
Low	21	21	26	450000
Lowest	24	24	29	300000

For DCIF:

$\text{Maxbps} = (\text{Maxbps}/3) * 5$  Note: **Maxbps** is the CIF's value with the same configuration(I P B)

For D1:

$\text{Maxbps} = (\text{Maxbps}/3) * 8$  Note: **Maxbps** is the CIF's value with the same configuration(I P B)

**【Alarm Adjust fps】** Select enable or disable, If select "enable", when alarm occurred, the camera will record with real-time frame rate(25fps or 30fps), even though **【Frame Rate(fps)】** has been set other values(eg:5fps).

**【Remote Quality】** Set the image quality of the clients to be recorded from Poorest, Poor, Medium, Very good and Best.



Click this button, users can make advanced setup for video quality of client end, also can setup I B P frame and adjust maximum bit rate according to the network bandwidth.

**【Image Size】** Set the resolution for local record. There is an item "704\*576(12fps)", each channel can be set "704\*576", but not real time, system will select frame rate automatically around to 12-15fps. To get best effect, you should set the resolution of local record according to your CPU configuration. There is a referenced configuration sample as below:

**Computer configuration:**

**CPU:** Intel Pentium 4 2.4GHz

**Motherboard:** ECS 848P-A

**Graphic Card:** ATI 9550 128MB,

**Memory:** 512MB

**HDD:** 120G (IDE)

**Recommended resolution configuration for different channels:**

DVR Board Channels	Recommended Resolution	Remark
64	CIF	Continuous recording is not recommended
48	CIF	
40	DCIF	
	CIF	
32	DCIF	
	CIF	

24	DCIF	
	CIF	
Less or Equal to 16	4CIF	
	DCIF	
	CIF	

**【OSD Date】** Select whether display the OSD date on the screen or not. When you select “Not”, the date will not display on the screen of corresponding channel.

**【Masking Bitmap File】** Watermark function ,the logo picture must be edited ad 128\*128 pixels file size and saved as bmp format.

**【Record Days】** This section allows users to determine how long the record data of each camera should be kept by the system. The maximum duration for on-line storage is 120 days. Users can select exact number of days, or can select “auto” mode. If select “auto”, system will auto-delete the recorded data of the earliest days when there is no enough space.

\*NOTE: If there is no enough space of HDD, system will delete the record data according to the length of saving time of each camera. Eg: there are four cameras, the 1<sup>st</sup> camera save 2 days, the 2<sup>nd</sup> camera save 5 days, the 3<sup>rd</sup> camera save 10 days, and the 4<sup>th</sup> camera we will set “auto” mode. If there is enough space, the 4<sup>th</sup> camera’s record data will save in HDD, while there are no enough space, system will delete data automatically. If the 4<sup>th</sup> camera’s record data has been saved more than 10days, system will delete the 4<sup>th</sup> camera’s data, if the 4<sup>th</sup> camera’s record data has been saved less than 10 days, but the 3<sup>rd</sup> camera’s data is more than 10 days, system will delete the 3<sup>rd</sup> camera’s data. So, even if you set the 3<sup>rd</sup> camera’s record data saving 10 days, the data that is saved less than 10 days become possible. System will delete the record data from the earliest date.

**【OSD Contrast】** Set OSD displaying brightness & position. An “auto” item in OSD Contrast’s drop-down list will make OSD suit the background’s color automatically.

**【Copy Setup to】** Set other cameras with the same setup.

Notes:

1. If less than 64 cameras are used, many of them can’t provide pictures sometimes and an alarm will appear (beep to tell you some video information is missing). Set the camera with no picture disabled and the alarm will disappear. When you want to use them later, set as enabled again.
2. The unit of the swap file should be MB. The range is 2 to 50.
3. Set the position and contrast of the date shown on the screen. Sometimes the date cannot be clearly seen for its color is similar with the background. You can change its position or color when this happens.
4. Image size is the format used when recording. Remote image size is the format used when these images are transmitted to client sides.
5. Remote Frame Rate, Remote image size and Remote Quality are the parameters of the client side. ①When the server’s image size is set as “704\*576(12fps)”, these three items are no effect, and client’s parameters will be same as server. ②When the server’s resolution is set as others (except “704\*576(12fps)”), if Remote image size is set as “Same as Rec”, Remote frame rate (fps) and Remote Quality are no effects, the client’s parameters will be same as server.
6. Variable digital rate table

Image quality	record environment	occupied disk space (/com/hour)
Poorest	low action, indoor	about 45Mb
	high action, road	about 95Mb
medium	low action, indoor	about 70Mb
	high action, road	about 180Mb
best	low action, indoor	about 160Mb
	high action, road	about 320Mb

Invariable digital rate can't improve image quality but it is helpful for calculating disk space.

Variable digital rate recording is recommended.

## 2.2.2 Group setup

Note: If you set a camera into several groups, only the last setup is available.

**【Selected Group】** Select group number.

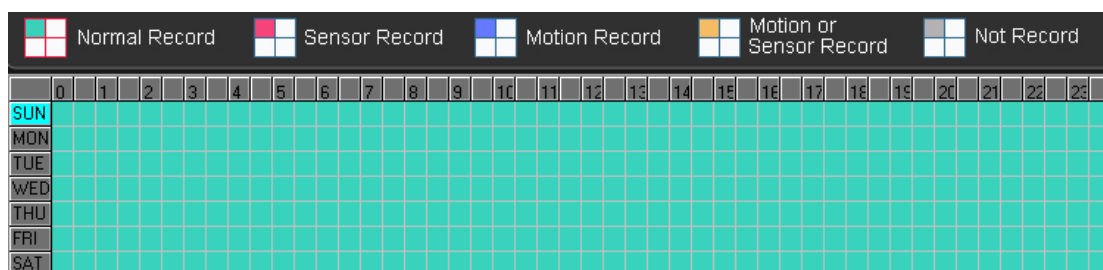
**【Selected Cameras】** Select the camera that have the same work mode with group. Cameras include local board card and IP module



**【Pre-Event Record】** Select the start time of record when there is an alarm. When DVR system is in Motion Detect mode or Sensor Detect mode, it can record video before the alarm is triggered.

**【Post Record Time】** Select the end time of record when there is an alarm. When the system is in Motion Detect mode or Sensor Detect mode, it can record video after the alarm end.

**【Record Audio】** Selects whether program record audio data or not, this setting is not available for IP Cameras, for stream type of IP Camera, you should set it remotely in [IP Camera setup](#).

**Recording Schedule Setup** (setting for cameras of local board cards and IP Cameras.)



Tips: One block of pane  means half an hour. Firstly click record mode icon , then click schedule diagram, hold down the mouse and move it to select large area (Drag & Drop).

1. Normal Record (Green): DVR System is always recording video. (e.g. Sun. Fri. Sat.)

**2. Motion Detect (Blue):** DVR System begins to record video only when it detect moving object. (e.g. Mon.) Click "Motion Detect" icon, then select your schedule time by drag & drop. For example, the above picture means: on Monday it is motion detect record, on Sunday it is normal record, but on TUE, WED and THU from 3:30 to 11:00 it is sensor record, from 14:00 to 22:30 it changes to both motion detect record mode and sensor detect record mode, other time is normal record.

**3. Event Record (red):** DVR System begins to record video only when there is the pos or the acu acts

**Note:** The time setup must be correspond with Check Alarm setups in Sensor setup otherwise it can 'ot work properly.

**4. Motion or Event Record (yellow):** Combine with above **2** and **3** function.

**5. Not Record (gray):** DVR System does not record video.

## 2.3 Sensor setup

### SENSOR SETUP

Select Sensor Sensor01

Sensor Enable

Sensor Position

Activate PTZ Preset Preset01

Play Alarm Sound  ... Test

Link to PTZ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

### GROUP SETUP

Selected Group Group01

Sensor Type N/C

Alarm Write Log Disable

Alarm Action After It Times-out ☒ Stop Immediately ☐ Do Not Stop ☐ Wait 10 Secs. Then Stop

Sensor Input 1 2 3 4 5 6 7 8

Start Recording Cameras 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Trigger Output Relays 1 2 3 4 5 6 7 8

☒ Check Sensor

☐ Not Check

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
SUN																								
MON																								
TUE																								
WED																								
THU																								
FRI																								
SAT																								

### 2.3.1 Sensor setup

**【Select Sensor】** Select the sensor from the drop-down list in order to set the parameters for it.

**【Sensor】** Select this sensor port to use or not.

**【Sensor Position】** Enter the description for easy identification.

**【Activate PTZ Preset】** Select linkage of Speed Dome preset number . Speed Dome will move to this preset number automatically when there is an alarm. (Speed Dome installation needed).

**【Play Alarm sound】** Select a sound of .wav for a sensor, if there is an alarm, the sound file will play.

**【Link to PTZ】** Select camera that is related to this sensor alarm.

## 2.3.2 Group setup

Sensor group setup is very similar to the group setup of camera recording.

**【Selected Group】** Select group number.

**【Sensor Type】** Select NC or NO alarm type.

**【Alarm Write log】** Select write alarm log or not.

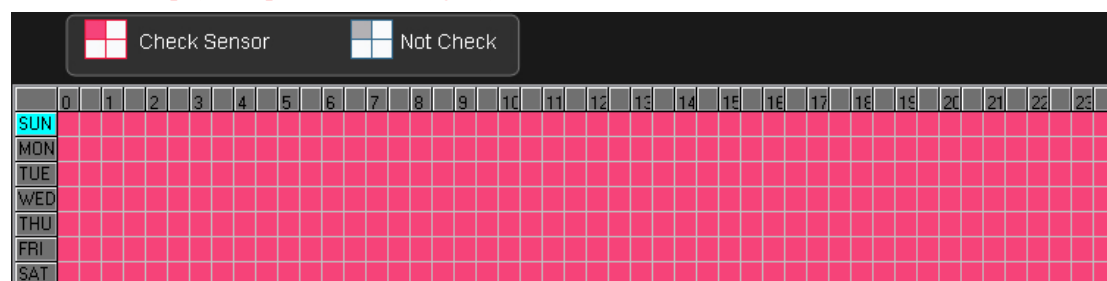
**【Alarm Action After It Times-Out】** Select system alarm linkage mode when an alarm stops. “Stop Immediately” means the system stop alarm immediately after the alarm driver stops an alarm. “Do Not Stop ” means the system don’t stop alarm after the alarm driver stops an alarm. “Wait” means the system will stop alarm at your setting time after the alarm driver stops an alarm.

**【Sensor input】** Add sensor to selected group.

**【Start recording cameras】** Set cameras that to be related to this sensor group. They will start recording and connect remote network client automatically when there is an alarm. The cameras just include the cameras of local board card; IP Cameras are not included. For IP Camera, you should set it remotely in [IP Camera setup](#).

**【Trigger Output Relays】** Add alarm devices (alarm out port) to this group such as siren, light. All connecting devices will send alarm message when there is an alarm.

Schedule Setup (Example for below figure)



1. Check Alarm (Red): DVR System responds with sensor during this time. (00:30 to 12:00 from Sun. to Sat.)

2. Not Check (gray): DVR System doesn't respond with sensor in this time.

Note: If you set a camera in several groups, only the last setup is available.

## 2.4 PTZ & Linkage setup

The screenshot shows two configuration panels. The top panel, titled 'PTZ PROTOCOL SETUP', contains the following settings: Selected Camera (Camera01), PTZ Port (COM1), PTZ Protocol (Pelco-D(H)), PTZ Address (1), PTZ Baudrate (2400), and PTZ Position (Normal). The bottom panel, titled 'CAMERA DETECTION RELAY CONTROL/REMOTE CLIENT ALERT', contains: DO Port (D001), DO Port Name (DO-1), Camera Alarm Detected In (Camera01), Send Alarm To Client (Disable), Motion Alarm Sound (empty field with a Test button), Video Loss Alarm Sound (empty field with a Test button), Trigger DO Output (checkboxes 1-8), and a legend for Motion & Video Loss, Motion Alarm, Video Loss, and Not Check. Below the legend is a 7x24 grid for scheduling, with rows for SUN, MON, TUE, WED, THU, FRI, and SAT, and columns for hours 0-23.

### 2.4.1 PTZ protocol setup

**【Selected Camera】** Select the camera from the drop-down list to be set the parameters. The cameras just include the cameras of local board card; IP Cameras are not included. For IP Camera, you should set it remotely in [IP Camera setup](#).

**【PTZ Port】** Select PTZ connecting port, when you do not use PTZ port, please choose “-----”.

**【PTZ Protocol】** Selects the PTZ protocol for the PTZ camera.

**【PTZ Address】** Set the camera ID number of the PTZ camera being controlled.

Note: The PTZ camera has a dipswitch to set the PTZ address. The PTZ camera ID number must be matched with the number of this dipswitch.

**【PTZ Baud rate】** Select PTZ Baud rate for the PTZ camera.

**【PTZ Position】** Select the installation mode of the PTZ according to its installation mode.

Notes:

1. PTZ position will influence PTZ control. E.g.: if you set it as obverse and press left, then it will turn left. If you set it as inverse and press left, then it will turn right.

2. If there is (H) after the PTZ protocol, it has the high speed of Preset function. If there is no (H), it only has ordinary functions.
3. The PTZ address will be sent as a message option. Take care that some address begins from 0. That is to say, when the address number is 1, the real address is 0. So we must set it according to their relations.

## 2.4.2 Motion detection relay & remote client alert

**【DO Port】【DO Port Name】** Select a DO port and set its name to identify the various DO port. It will be shown as a tip when the mouse moves closely or above the DO button in DVR Server or NVR Client.

**【Camera alarm detected In】** Selects camera to be set from dropdown list.

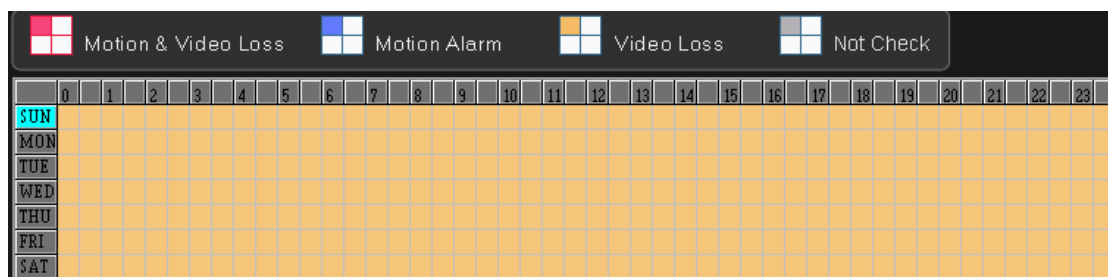
**【Send Alarm to client】** Select sending alarm to network clients or not.

**【Motion Alarm Sound】** Press  button to selects a “.wav” sound File for a motion alarm. If there is a motion alarm, the sound file will be played. Also, you can test it by pressing  button.

**【Video Loss Alarm Sound】** Press  button to selects a “.wav” sound File for a video loss alarm. If there is a video loss alarm, the sound file will be played. Also, you can test it by pressing  button.

**【Trigger DO Output】** Selects which DO ports will be triggered by above camera alarms.

**Schedule Setup** (setting for cameras of local board cards, IP Cameras are not included.)



1. Motion & Video Loss (Red): DVR System responds with Motion Detection and Video Loss alarm in specified time.
2. Motion Alarm (Blue): DVR System only responds with Motion Detection alarm in specified time.
3. Video Loss (Yellow): DVR System only responds with Video Loss alarm in specified time.
4. Not Check (gray): DVR System doesn't respond with any alarms in specified time.

Note:

Check Alarm Setup (including Motion & Video Loss, Motion Alarm and Video Loss) does not take affection to Motion Detect Record. It is only alarm setup. It takes affection to motion detect alarm out and motion detect alarm to network.

## 2.5 E-mail setup

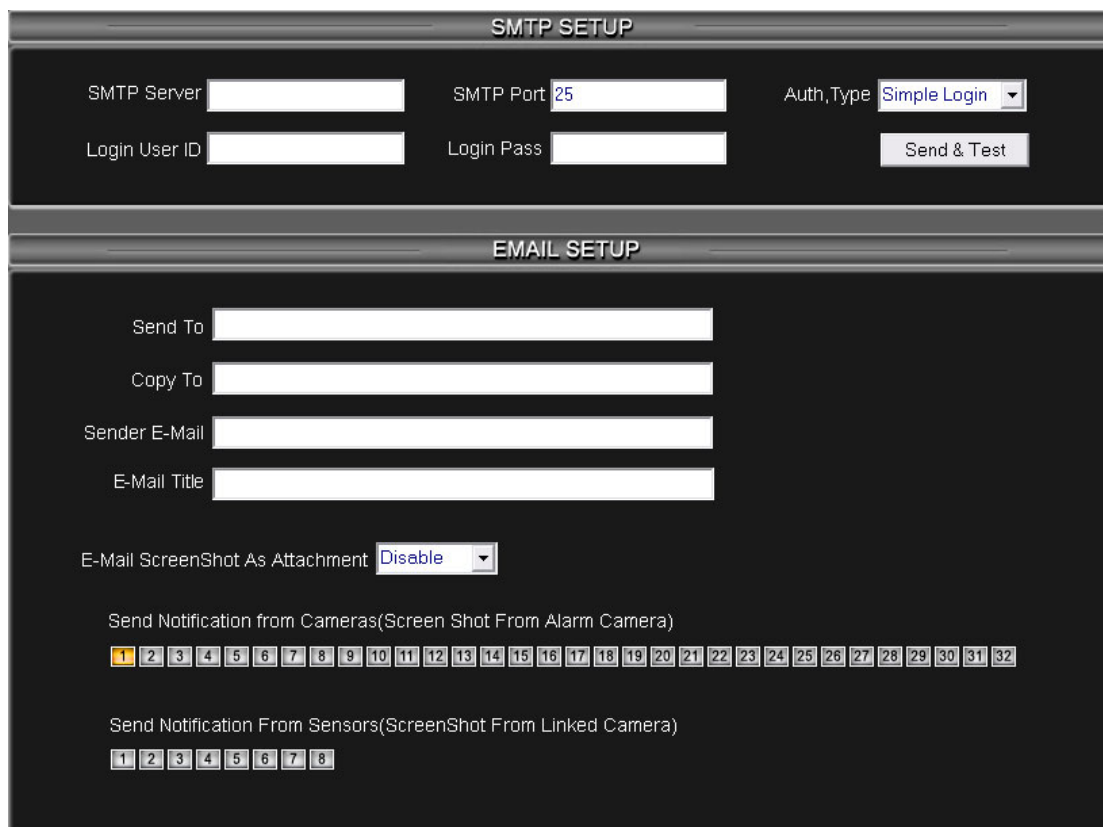
Press  button to enter E-Mail setup:

Note: Before you set the E-mail setup, you should pay attention to several points as below:

The alarm to trigger E-mail sending includes two types: Camera-related alarms (Motion detection alarm & Video loss alarm) and Sensor-related alarms.

For Camera-related alarms, you should set [Motion detection area & Cover setup](#) and to check alarm in [Motion detection relay & remote client alert](#). For Sensor-related alarms, you should set to check sensor and select cameras to be triggered in [Sensor setup](#).

When you enable system capture image as attachment of E-mail, the system will capture a still picture of camera for Camera-related alarms or related camera for Sensor-related alarms to be sent as an attachment with E-mail.



**SMTP SETUP**

SMTP Server  SMTP Port  Auth.Type

Login User ID  Login Pass

**EMAIL SETUP**

Send To

Copy To

Sender E-Mail

E-Mail Title

E-Mail ScreenShot As Attachment

Send Notification from Cameras(Screen Shot From Alarm Camera)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30 ☐ 31 ☐ 32

Send Notification From Sensors(ScreenShot From Linked Camera)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8

## 2.5.1 SMTP setup


**【SMTP Server】** SMTP server address, eg: mail.jstDVR.com,

**【SMTP Port】** SMTP listen TCP's port for connect request.

**【Auth.Type】** Logon mailbox, operator will select SMTP authentic type.  
Or select "simple login".

**【Login User ID】** Mailbox's ID.

**【Login Pass】** Mailbox's password.

After user setup finished, can press  to test the function.

## 2.5.2 E-Mail setup

**【Send To】** Set address of receiver.

**【Copy To】** Set another address of receiver to whom system sends E-mail.

**【Sender Email】** Enter email address of sender.

**【Email Title】** Enter title of the E-Mail to be sent.

**【Email Screenshot As Attachment】** When there is alarm, the system will grab picture, operator can select whether send the picture as attachment of the E-mail.

**【Send Notification from Cameras(Screenshot From Alarm Camera)】**

Operator can select the cameras, which will trigger to send E-mail when they have alarms.

**【Send Notification from Sensors(Screenshot From Linked Camera)】** Operator can select the sensor, which will trigger to send E-mail when they have alarms.

*\*NOTE: If send the grab picture as the attachment, you should check alarm of the camera or the sensor, and set "alarm send to network" to be enabled.*

## 2.6 Digital matrix setup

**MATRIX SETUP**

Matrix Group: SetGroup1

Video Out Port: Video Out 01

Video Out Standard: PAL

Video Switch Interval(Sec): 3 sec

Video View Mode: 1 View

Video Window: Window1

Display Video Cameras In Window: Main camera channel

Grid of 32 camera channels (1-32) with channel 1 selected.

---

**DISPLAY SETUP**

Display Group: SetGroup1

Video View Mode: 64 View

Video Window: Window1

Display Camera In the Window

Grid of 64 camera channels (1-64) with channel 1 selected.

### 2.6.1 Matrix setup

**【Matrix Group】** System operator can set a groups of video images to be sent out through matrix decode card, each group has different display mode. Up to 16 groups you can set.

**【Video Out Port】** Select the output port of Matrix card that you want to set, the total number of channels is decided by Matrix Decoder card.

**【Video Out Standard】** Set Matrix video out standard, you can select from PAL and NTSC.

**【Video View Mode】** Select video output display mode, there are 1split

1, 2split , 4split , 9split , 13split  and 16 split .

**【Video Window】【Display Video Camera in window】** After selecting video split mode, there will have corresponding display video window, select one camera or several cameras to show in the window.

*\*Note: one camera is only showed in one window once.*

**【Video Switch Interval(sec)】** Set interval that each window shows cameras circularly when there have more than one camera in it.

## 2.6.2 Display setup

**【Display Group】** System operator can set a groups of cameras to display for fast preview, including its display mode and cameras. Up to 16 groups can be set.

**【Video View Mode】** Set the split mode, the split mode is same as main window's display split mode. There are 1, 4, 9, 13, 16, 20, 25, 28, 33, 36, 40, 49 and 64 partition mode.

**【Video Window】【Display Camera in the window】**After selecting video split mode, there will have corresponding windows, select one camera show in per window. The cameras include 64 cameras (the biggest of the system limitation), when the total channels (cameras of local board card and IP Cameras) are less than 64, some channels do not have image with black window.

*\*Note: One camera is only showed in one window once, but each camera can display any window discretionarily. E.g.: The 1<sup>st</sup> camera has been displayed in window1, and the 2<sup>nd</sup> camera has been displayed in window2. When change the 1<sup>st</sup> camera to be displayed in window2, the 2<sup>nd</sup> camera will be exchanged in window 1 automatically.*

## 2.7 Password setup

**USER INFORMATION**

Local Password Disable

Auto Lock Time 6 minutes

Network Password Enable

User Name   
 Auth.level Manager  
 Password   
 Password Confirm   
 Note:

User Name	Auth. Level
admin	Manager

**USER RIGHT SETUP**

Select Setup Items Camera view right

Cameras View Right Lock Mode All user view

Cameras 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

☒ Matrix Control   
 ☒ Color Adjust   
 ☒ Modify Network   
 ☒ Delete File In Search


User Access Rights ☒ Search Log   
 ☒ Open Map   
 ☒ Motion Setup   
 ☒ Minimum

☒ DVR Board Setup   
 ☒ DO Control   
 ☒ Exit Program   
 ☒ Explorer & para backup

Setup Right ☒ System Setup   
 ☒ Camera Setup   
 ☒ Sensor Setup   
 ☒ Linkage&PTZ

☒ Email Setup   
 ☒ Digital Matrix

## 2.7.1 User information

**【Local Password】** Check to enable User Manage mode for local PC DVR, and activate the lock button  in main window. Only authorized user can log into System at User Manage Mode.

**【Auto lock time】** Select a time to enable system to lock automatically when there have no actions after this time.

**【Network Password】** Check to enable User Manage mode for Client. When you enable this function, client must pass the authentication to connect with PC DVR.


**【User Name】** Input new User ID in this box when add a new user to system.

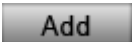
**【Arht. Level】** Select user type. Only Administrator can enter User Manage Window and have the power of user management.


**【Password】** Set new user or selected user's password.


**【Password Confirm】** Confirm password again.

**【Note】** Input your description of this user.

**【New User】** Press  button to edit the user you want to add in the **【User Name】** blank. Input User Name, Note Name, Password, and Confirm Password. Select Manage Right (Administrator or Operator), and then click Add User to save.

**【Add User】** Up to 15 users can be added to system except Admin. Click  icon to add new user you edited to user list.

**【Modify User】** Select a user from user list, then click  button to modify it.

**【Delete User】** Select a user from user list, then click  button to delete it.

## 2.7.2 User right setup

**【Viewable Camera】** Select the cameras can be viewed by the user you are setting. By default, every user is granted to access all live images. To deny access, you can click the desired cameras button and the color will change from blue to gray.

**【Playback Camera】** Select the cameras can be play backed by the user you are setting. By default, every user is granted to playback video data of all cameras. To deny access, you can click the desired camera button and the color will change from blue to gray.

**【Audio monitor right】** Select cameras whose audio can be heard by the use you are setting. By default, every user is granted to check audio of all cameras. To deny access, you can click the desired camera button and the color will change from blue to gray.

**【Operation Right】** Select operational tasks, granting or denying rights. Operational tasks are normally reserved for administrative, privileged accounts. Operators are rarely granted rights to adjust camera color, exit program, explore files or operate PTZ controls.

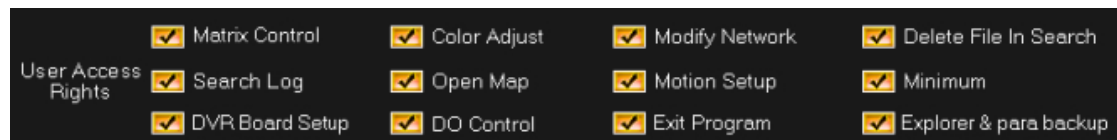


Figure2—2

### 【Setup Right】

Select setup rights to grant or deny user privileges.

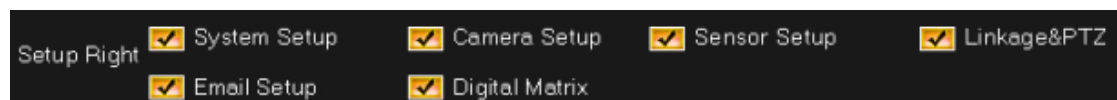


Figure2—3

## Chapter3 IP Camera Setup

Note: for IP camera setup, its alarm and related setup is only be available when you set remotely, the Local setup of PC DVR is not available for IP Cameras except Recording Schedule in [Camera Setup](#)

The screenshot shows the 'Alarm Setup' tab of a configuration window. The fields are organized into two columns:

Field	Value
Server Name	Embedded Net DVS
Server IP	192.168.0.8
Port	8000
Subnet Mask	255.255.255.0
Net Gate	192.168.0.1
Net Cable type	10M/100M(5 cable)
Use PPPOE	<input type="checkbox"/>
PPPOE Login Name	
PPPOE Login Pass	
PPPOE IP	0.0.0.0
Serial NO	DS6101HF0020070314BCCH001000110WCU
User name	admin
User Pass	*****
DNS Server IP	0.0.0.0
Remote Manage Ip	0.0.0.0
Remote Manage Port	0
Physical address	00:40:30:4e:fd:7e
Software Ver.	2.0
Dsp software Ver.	4.0
Hardware Ver.	45056.0

At the bottom of the window, there are five buttons: Upgrade, Restart, Time Adjust, Save, and Exit.

### 3.1 Functional buttons

There are 5 buttons in each page. They are Upgrade, Restart, Time adjustment, Save and Exit.

**Upgrade** The system can upgrade to the server remote. Click this button, and select the right file.

**Restart** Some setting will only come into effect after device reboots.

**Time Adjust** Adjust date and time of DVS or EMDVR. The new date and time will accordant with NVR client computer.

**Save** After setup is finished, click this button to save the setup.



Exit setup.

Remote setup for DVS including Server, Channel, PTZ, Sensor and Alarm.

## 3.2 Server setup



Press **Server** button to set server parameters remotely:

Server Name	Embedded Net DVS	User name	admin
Server IP	192.168.0.8	User Pass	*****
Port	8000	DNS Server IP	0.0.0.0
Subnet Mask	255.255.255.0	Remote Manage Ip	0.0.0.0
Net Gate	192.168.0.1	Remote Manage Port	0
Net Cable type	10M/100M(5 cable)	Physical address	00:40:30:4e:fd:7e
Use PPPOE	<input type="checkbox"/>	Software Ver.	2.0
PPPOE Login Name		Dsp software Ver.	4.0
PPPOE Login Pass		Hardware Ver.	45056.0
PPPOE IP	0.0.0.0		
Serial NO	DS6101HF0020070314BCCH001000110WCU		

In the server window, some blanks' background are gray. Those parameters are read from foreside server, you can't modify them. Other blanks whose background is white, you can set them remotely.

**【Server Name】** Enter the name description for easy identification. This name delegates the foreside server. If use DNS to get IP, this name will be used.

### 【IP configuration and related】

**【Server IP】**

**【Port】**

**【Subnet Mask】**

**【Net Gate】**

**【Net Cable Type】**

These are network configuration; you can set LAN or Internet IP according to your need.

### 【Connection configuration and related parameter】

**【If use PPPOE】**  
**【PPPOE Login Name】**  
**【PPPOE Login Pass】**

If system uses PPPOE to connect with web, please select it and input the PPPOE login ID and password.


**【User Pass】** Set the user password of DVS remotely, after that operation you should change the Login Pass to corresponding value in Add / Modify server. Otherwise, you can't connect the DVS correctly.

**【DNS Server IP】** If use DNS, input the DNS host IP address.

**【Remote manage】**  
**【Remote manage IP】**  
**【Remote manage port】**

Set the IP address and port of host server who will receive the message upload from foreside server

## 3.3 Channel setup

Press  button to set channel parameters.



The screenshot shows the 'Channel Setup' interface for Camera 01. It includes settings for video stream (MasStream/SubStream), frame rate (20), resolution (2CIF), and stream type (Audio+Video). There are checkboxes for OSD, Show Week, Show Logo, and Privacy Mask. A live video preview is shown on the left. On the right, there is a 'Record schedule' section with options to enable recording, set the day (Mon.), and motion detection type. It also includes a table for recording periods and a 'PostRec' / 'PreRe' section.

Period	Start Time	End Time	Rec Type
Period1	00:00	23:00	Motion detect
Period2	00:00	00:00	Motion detect
Period3	00:00	00:00	Motion detect
Period4	00:00	00:00	Motion detect

This section contains the parameters to designate a name for every camera connected, to enable or disable show LOGO and OSD, and to set display type of OSD & LOGO as well as record resolution, record type, record quality and frame rate, etc.

**【Camera】** Select the camera to be set from the drop- list.

【**Camera Name**】 Enter a name description for easy identification.

【**Frame Rate**】 Select the record rate of camera from drop-list.

【**MasStream**】 【**SubStream**】 Select MasStream or SubStream for the current cameras.

【**Resolution**】 Set the resolution at which the video files will be recorded. Choices are DCIF, CIF, QCIF, 2CIF and 4CIF. The higher resolution, the more disk space.

【**Stream Type**】 Select video and audio or only video record.

【**Image**】 Set the quality of the image to be recorded. Select from worst, worse, normal, good and Best.

【**Bit Rate Type**】 Select bit rate type from Variable Bit Rate (VBR) and Fixed Bit Rate (FBR) record:

VBR range= Poorest, Poor, Medium, Good, Best.

FBR range = 45 Megabytes/Hour to 400 Megabytes/Hour.

【**Max Bit Rate**】 Select the maximum bit rate for Variable Bit Rate (VBR) record.

【**Show LOGO/ OSD/ Week**】 If you check those box, system will show corresponding information on screen.

【**Position**】 Set the position of OSD or Logo by entering the X and Y coordinate directly.

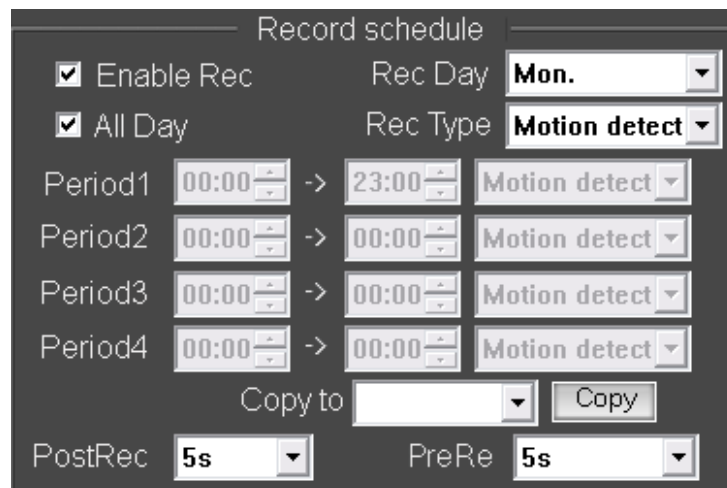
【**OSD**】 Set the display attribute of the OSD & LOGO. There are four types display modes: Clarity-Glitter, Clarity-Not Glitter, Not Clarity-Glitter and Not Clarity-Not Glitter.

【**OSD Type**】 Select the type of OSD for the Week.

【**Privacy Mask**】 You can check this box to set the privacy mask on the below image directly, and you can clear some privacy masks by pressing

 button.


【**Record schedule**】 You can set record schedule in following chart



The 'Record schedule' window contains the following settings:

- ☒ Enable Rec
- ☒ All Day
- Rec Day: **Mon.** (dropdown)
- Rec Type: **Motion detect** (dropdown)
- Period1: 00:00 -> 23:00, Motion detect (dropdown)
- Period2: 00:00 -> 00:00, Motion detect (dropdown)
- Period3: 00:00 -> 00:00, Motion detect (dropdown)
- Period4: 00:00 -> 00:00, Motion detect (dropdown)
- Copy to: (empty dropdown) [Copy button]
- PostRec: **5s** (dropdown)
- PreRe: **5s** (dropdown)

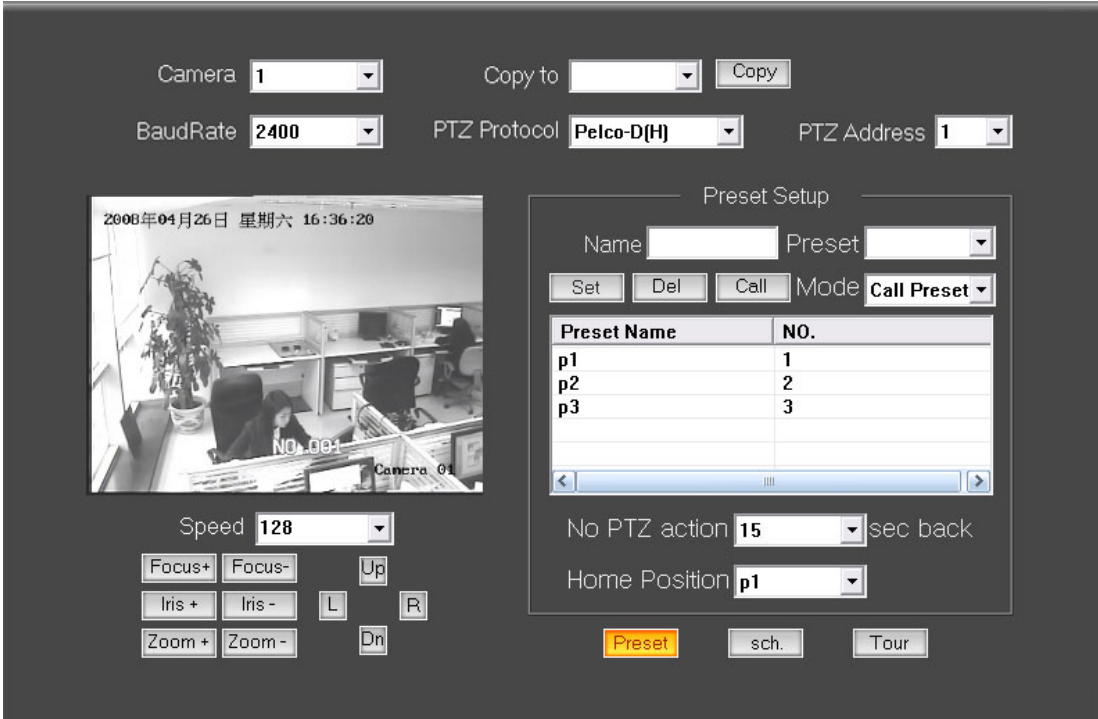
**Note:** This record schedule is only available to EM-DVR. There are 4 time segments every day. Every segment has start time, end time and record type. The time segment is set in sequence, every segment can't be overlapped, included or skipped with any other.

**【Copy to】** After finishing one channel, if you want to set any other channels' configuration as the same as this camera, you can select channel number from drop-list, and press  button.

PostRec  PreRe , Set the time to post or pre the record.

### 3.4 PTZ control

Press  button to set PTZ



The screenshot shows the PTZ control interface. At the top, there are settings for Camera (1), Copy to (empty), BaudRate (2400), PTZ Protocol (Pelco-D(H)), and PTZ Address (1). A 'Copy' button is next to the 'Copy to' field. Below these is a live video feed showing an office scene with a timestamp '2008年04月26日 星期六 16:36:20' and 'NO.001'. To the right of the video is a 'Preset Setup' panel. It includes fields for Name and Preset, buttons for Set, Del, Call, and Mode (set to Call Preset), and a table of preset names and numbers. Below the table are fields for 'No PTZ action' (15 sec back) and 'Home Position' (p1). At the bottom of the panel are buttons for Preset, sch., and Tour. Below the video feed are controls for Speed (128), Focus+, Focus-, Iris+, Iris-, L, R, Zoom+, Zoom-, Up, and Dn.

Preset Name	NO.
p1	1
p2	2
p3	3

In this screen, you can define the PTZ protocol and set the Preset Position as well as the plan to execute them automatically.

**【Camera】** Select the camera to be set from the drop- list.

**【Baud rate】** Set baud rate according to PTZ protocol from the drop- list.

**【PTZ Protocol】** Select the communication protocol for the PTZ camera from drop-list.

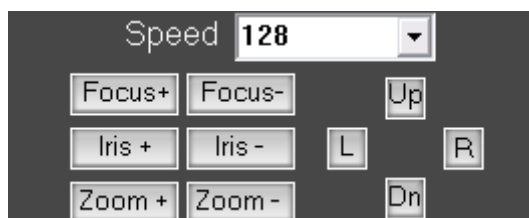
**【Copy to】** After finishing one channel, if you want to set any other channels' configuration as the same as this camera, you can select channel number from drop-list,

and press  button.

**【PTZ Address】** Set the address of the decoder, which must be matched with the value of dipswitch in the PTZ.

**【Speed】** Set the speed of the PTZ.

**【Preset position & schedule setup】** Define preset position and set time to call preset position automatically. System can add and delete plan time.



Preset Setup

Name  Preset

Mode

Preset Name	NO.
p1	1
p2	2
p3	3

No PTZ action  sec back

Home Position

### Preset

**【Name】** Set the name for the current preset. **【Preset】** Set the preset number for the current camera  SetUp the preset by current configuration.  Delete the finished Preset.  Call the Preset if the Mode is Call preset. The mode is save preset, you should save the preset and shouldn't call the preset.

No PTZ action  sec back Set disable or how long the ptz will come back to the home position when there is no ptz action

Home Position

Preset Schedule

Preset 2 Add Del

Call Time Mon. 2 H 1 M

Copy to  Copy

Date	Time	Preset
Mon.	02:01	2

**【Preset】** it can add the preset into the Preset Schedule, the preset set completed in the AutoPre yet, **【Call Time】** **【Schedule List】** Set the time of the preset should be call at that time.

Tour

Tour Setup

Tour Group TourGroup1

Add Del Preset Name p3

Stay Time 2 sec

Preset Name	NO.	Time
p1	1	2
p3	3	2

Tour Group

Add the Preset cameras into the Tour Group and set the Stay Time for one tour group.

## 3.5 Sensor setup

Press Sensor button to set sensor parameters.

Sensor NO

Sensor Name

Copy to

Type

☒ Sensor Alarm Handling

**Policy**

☒ On screen warning

☒ Audible warning

☒ Upload to center

☒ Trigger alarm out

☒ 1 ☒ 2 ☐ 3 ☐ 4

**Trigger rec camera**

<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 5	<input type="checkbox"/> 9	<input type="checkbox"/> 13
<input type="checkbox"/> 2	<input type="checkbox"/> 6	<input type="checkbox"/> 10	<input type="checkbox"/> 14
<input type="checkbox"/> 3	<input type="checkbox"/> 7	<input type="checkbox"/> 11	<input type="checkbox"/> 15
<input type="checkbox"/> 4	<input type="checkbox"/> 8	<input type="checkbox"/> 12	<input type="checkbox"/> 16

**Preset**

☒ Use

Camera  Preset

**Schedule**

Day

Period1  ->

Period2  ->

Period3  ->

Period4  ->

Copy to

**【Sensor NO】** Select one sensor to be set.

**【Sensor Name】** Enter the name description of the sensor.

**【Type】** Select alarm type (sensor type) from “NO”(Normally Open) or “NC”(Normally Close).

**【Policy】** Selecting “Sensor Alarm Handling” firstly, handling policies will be available as follows:

On screen warning—Display the alarm information on the monitor.

Audio warning—Indicate the alarm with voice.

Upload to center—Update the alarm information to center.

Trigger alarm out—Trigger alarm box to output the alarm.

**【Trigger record camera】** Set cameras to record triggered by the alarm. You can select one or more channels. When there is alarm input, the cameras will be triggered to record (the record type of the channel is Alarm Record), and the monitor will switch to preview the cameras (warning on monitor is enable).

**【Preset】** Set camera that will move to its one preset position when the alarm happened.

**【Schedule】** Set alarm input precaution time firstly, then set time segment according to the sequence. The time of each segment should not overlap the others and no skips are allowed. After the precaution time of a certain day is set, you can copy the parameter to other dates by select a day and press copy button.

**【Copy to】** After finishing one channel, if you want to set any other channels' configuration as the same as this camera, you can select channel number from drop-list, and press **Copy** button.

## 3.6 Alarm setup

Press **Alarm Setup** button to set alarm parameters.

**【Camera】** Select a camera to be set from the drop-list and you can copy the configuration to the other cameras by clicking copy button.

**【Alarm Type】** Select alarm type: Motion detect, Tempering alarm and Video Loss.

**【Level】** Select sensibility levels from 0 (the lowest level) to 5 (the highest level) for the alarm.

**【Set motion detection areas】** Left-click mouse and drag it on the screen to select motion detect area, you can select the whole area or many areas. Also, you can clear one or whole area by press the button clear and test the effect by clicking test button.

**【Policy】** Selecting “Handling current alarm” firstly, handling policies will be available as follows:

On screen warning—Display the alarm information on the monitor.

Audio warning—Indicate the alarm with voice.

Upload to center—Update the alarm information to center.


Trigger alarm out—Trigger alarm box to output the alarm.

**【Trigger record camera】** Set cameras to record triggered by the alarm. You can select one or more channels. When there is alarm input, the cameras will be triggered to record (the record type of the channel is Alarm Record), and the monitor will switch to preview the cameras (warning on monitor is enable).

**【Schedule】** Set alarm input precaution time. Select date firstly, then set time segment according to the sequence. The time of each segment should not overlap the others and no skips are allowed. After the precaution time of a certain day is set, you can copy the parameter to other dates by select a day and press copy button.

The screenshot shows a 'Schedule' window with the following elements:

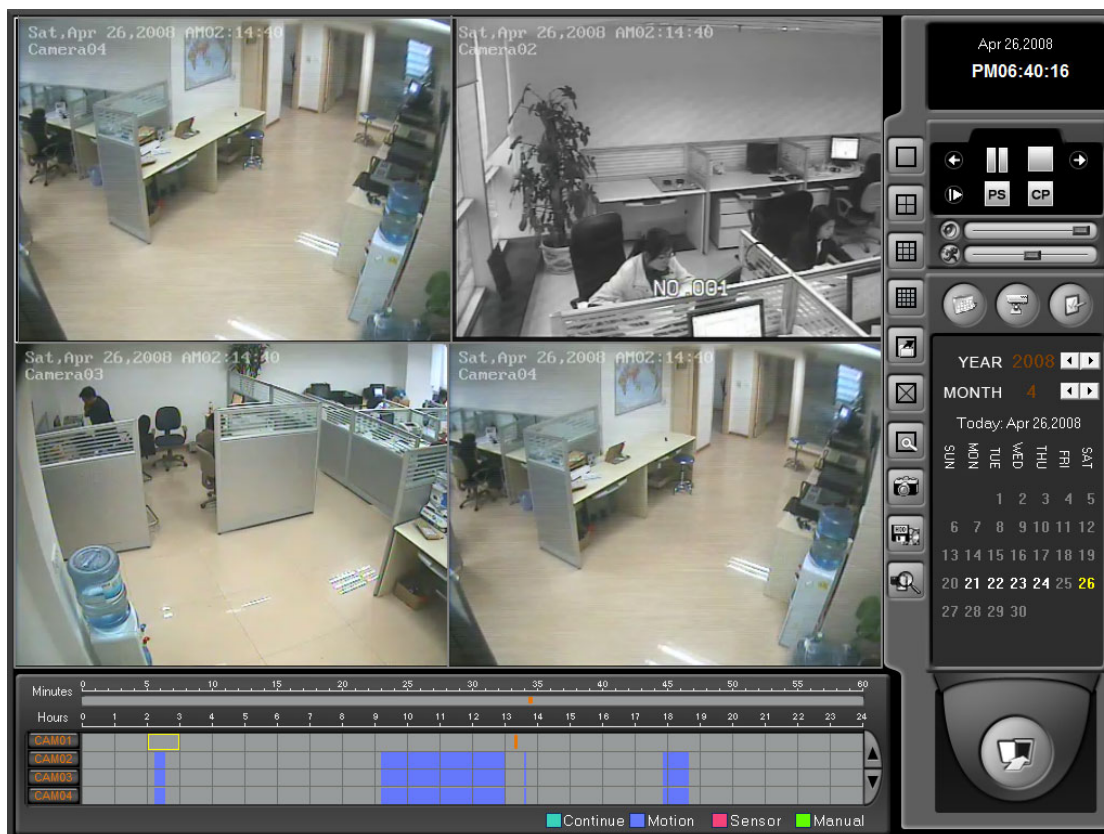
- Day:** A dropdown menu currently showing 'Wed.'.
- Period1:** Time range from 21:00 to 00:00.
- period2:** Time range from 00:00 to 00:00.
- Period3:** Time range from 00:00 to 00:00.
- Period4:** Time range from 00:00 to 00:00.
- Copy to:** A dropdown menu for selecting a target day.
- Copy:** A button to copy the current schedule to the selected day.

**【Copy to】** After finishing one channel, if you want to set any other channels' configuration as the same as this camera, you can select channel number from drop-list, and press  button.

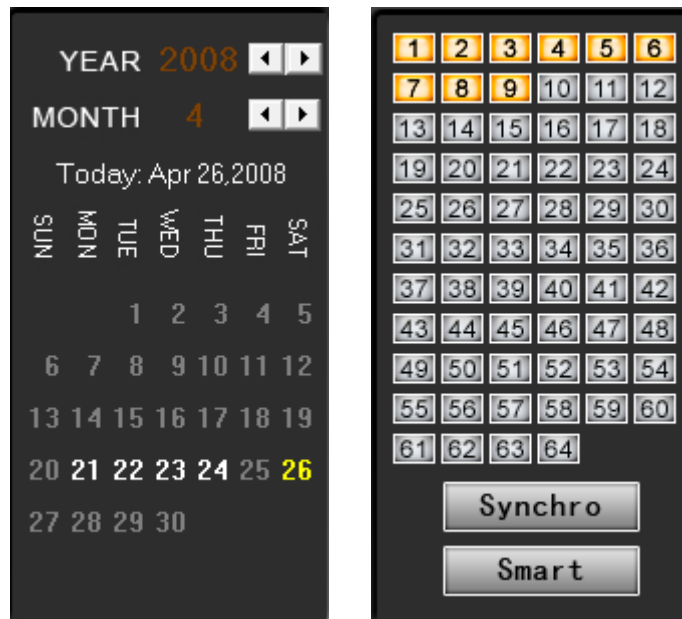
# Chapter4 Playback

## 4.1 Main interface


Click  button in main interface to enter playback interface.




## 4.2 Select playback channel



### 4.2.1 Select date

Select one window (the 1<sup>st</sup> one in default), and then click  button to show the date .

The blue dates contain recorded data. The green date is the current date. The gray dates signify no data. Only those blue ones can be selected and when they are selected the camera window will appear automatically to show which cameras has record data.

Click  or  to change month and year of search data.

You should select the data first, otherwise, you can't entry the all sub-playback interface. It can't select the data in the sub- playback interface

### 4.2.2 Select camera

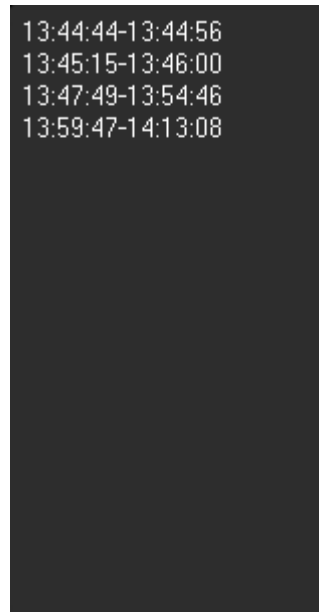
After selecting date system will show the camera state of corresponding day, or click




button directly to show the cameras state of current day . The number button with navy blue means this channel has record data. By pressing it directly on the numerical

panel , DVR system will play back recorded data from the first file.

### 4.2.3 Select file





After selecting the camera to play user can click  button to show all the files of this camera.

In default, system will play back video file from the first one. In this screen you can change the file you want to play by clicking it directly.

The camera list below the window will show the recorded data of the day you select. Double clicking one hour of that day ,system will play back data from the beginning of the hour via the window you select.



Press  or  button to see the recorded data of other cameras ,







Click any minute of that hour , immediately, the system will turn to play back that time via the window you select.

The red bar of the minutes list and hour list means the exact time which system is playing back now.

**Tips:** Right click the picture to perform digital zoom function.  
Different color will show information of all cameras. You can see all kinds of record, their time and length according to recorded data.

## 4.3 Play file and related operations

Press corresponding buttons to set partition mode of Window, there are 1 , 4 , 9  and 16  splits. To reduce the load of CPU and get best effect, you should select the partition mode according to the record channels amount and resolution. There is a referenced configuration sample as below:

**Computer configuration:**

**CPU:** Intel Pentium 4 2.4GHz

**Motherboard:** ECS 848P-A

**Graphic Card:** ATI 9550 128MB

**Memory:** 512MB


**HDD:** 120G(IDE)

**Recommended channel configuration for playback:**

DVR Board Channels	Record Resolution	Recommended Playback Channels
64	CIF	4
48	CIF	4
40	DCIF	4
	CIF	4
32	DCIF	4
	CIF	9
24	DCIF	9
	CIF	16
Less or Equal to 16	4CIF	4
	DCIF	9
	CIF	16



Press this button to open all playback windows in sequence according to the order of the cameras.

Press the button , you will see the interface as below:

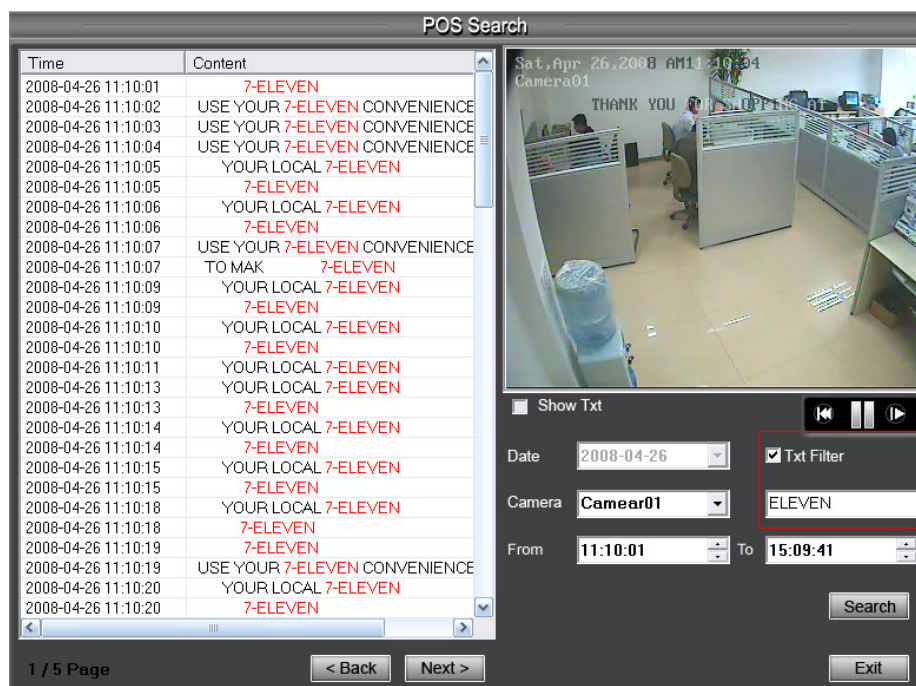


Show Txt: show the txt on the screen,(if you select txt overlay in the Cam setup,the show txt is invalid.

Data :Select the search data.

Camera:Select the search camera

TXT Filter:Search the content including the word. Eg:



The word of the TXT.Filter is ELEVEN,then,press the Search ,the

content display all the Pos messges with the “ELEVEN”

From.. To: Select the begin time and the end time

 press this button to search the record for the setting setup

  press these button to back or next the display


page.


 CP






 Select the cameras





  Set the


begin time and the end time of the record ,  set the time of the one view plays. Eg: as the above image, the time from 9:02 to 23:59, it include 178 minutes between the begin time and the end time, the screen is 4 views, the first view show the 0-10 minutes' record, the second view show the 10-20 minutes' record, ..., when the 4 views plays endly, it will play the second 40 minutes until the 178 minutes all endly.





 Press this button to close all playback windows.


  Previous / Next frame: press this two buttons to look previous or next frame.


 Reverse play: press this button continuously to play video reversely, the speed is determined by the following playing speed adjustment bar.


 Play/Pause: This button will alternate between Play and Pause. When it is playing, it will show  and press it to stop, and then the button will show . When you select reverse playing, it will show  to play by pressing it.

 Stop: press this button to stop playing.

    First frame of that day, Previous minute, Next minute and Last frame of that day.


 Image zooms out. Press this button, Left-Single-Click an image; quarter of the image will be enlarged. Right-Single-Click the image again, it will resume the normal.

 Adjust the voice: drag the bar to adjust the voice and click the left button to clear the voice.

 Adjust playing speed: drag the bar to adjust the playing speed and click the left button to resume normal playing speed.


*\*Note: It is not suggested that multi-channel (more than 10 channels) record or playback coinstantaneous unless your PC has a advanced configuration, because the data throughput of HDD is huge in that case. Multi-channel search in client and server are the same except their paths. In client, they are in local; in remote search, it searches among the record data in server in the local network.*

## 4.4 Capture picture

Click capture button  to capture a still picture. When one is captured, there will display a dialog to ask for a file name. After your confirmation, you will be asked to input the save path.

*\*Note: the size of the image is that of the playing window.*

## 4.5 Create clip file

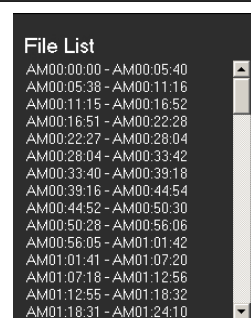
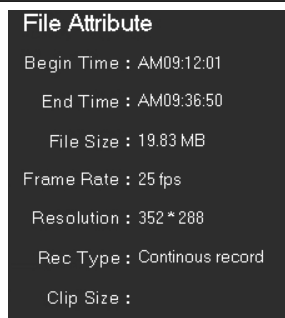
Click button , there are three items to be selected as below.

### 4.5.1 Create file clip

Press  to create file clip.

**【Select channel and save path】** Select channel and save path of the backup file on the top of interface.

**【File list and attribute】** Select a file and double-click it to play and its attribute will display below the list, including begin time, end time, file size, resolution, frame rate etc.



**【Play control button】** User can press and drag slider on



to control the player time.


**【Beginning and stop position setup】** After you select a time, press



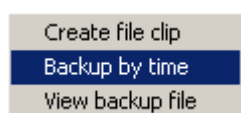
button to set it as the beginning time, and then drag the bar to select



another time and press button to set it as the end time. When you finished, the file attribute on the left will show the size of the file to be created.

**【Save file】** After you set the beginning and end time press  button to save the file, and it will ask for the file name named by you.

## 4.5.2 Backup by time:



Press to enter backup by time feature.

**BACKUP**

Save Path: D:\Backup\_

Select Begin Time: 4/25/2008 10:35:15 PM

Select End Time: 4/26/2008 7:35:15 PM

Backup Date Size: 3445Mb

Backup Camera:

- ☒ Camera01
- ☒ Camera02
- ☒ Camera03
- ☐ Camera04
- ☐ Camera05
- ☐ Camera06
- ☐ Camera07
- ☐ Camera08
- ☐ Camera 01

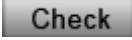
Check Backup Exit

**【Save Path】** Select path for the backup file, User can backup record file to CD.

**【Backup Camera】**Select the backup camera. User can select more than one camera at one time.

**【Select begin time】** **【Select end time】** Select the beginning time and end time of the file to backup.

It can backup the data feature and remove file unite function when backup, so that backup procedure is faster.

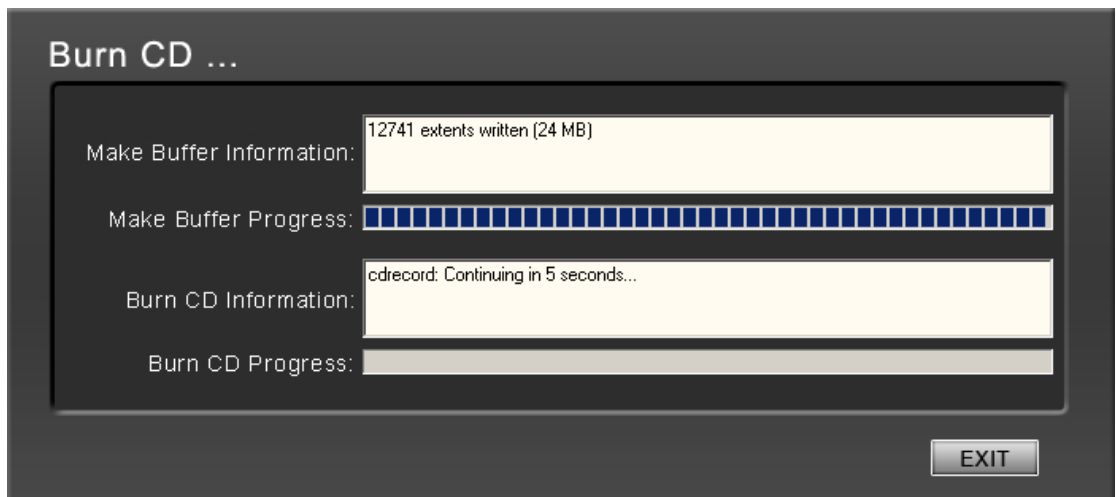
You can check the file's value by pressing  button to show its total value.

**【Backup Date Size】** Show the size of the backup file. If user backup recording file to CD directly, the date size should not more than 650M.

**NOTE:** If user backup recording file to CD directly, the system disk volume's(C volume in general) free space should not less than twice of the backup date size. Because system volume will be used buffer area when burn CD. For example, if the backup date size is 450M,so, the system volume's free space should more than 900M.

The process of burning CD:

1. Select the CD-ROM as backup path, and select the camera and time.
2. Check the backup file value.
3. Backup the file to the temporary file in the last volume if there have enough free space. Otherwise, write backup file to the last second volume.
4. Write data to buffer.
5. Write CD.



6. Delete buffer and temporary file.

### 4.5.3 View Backup file



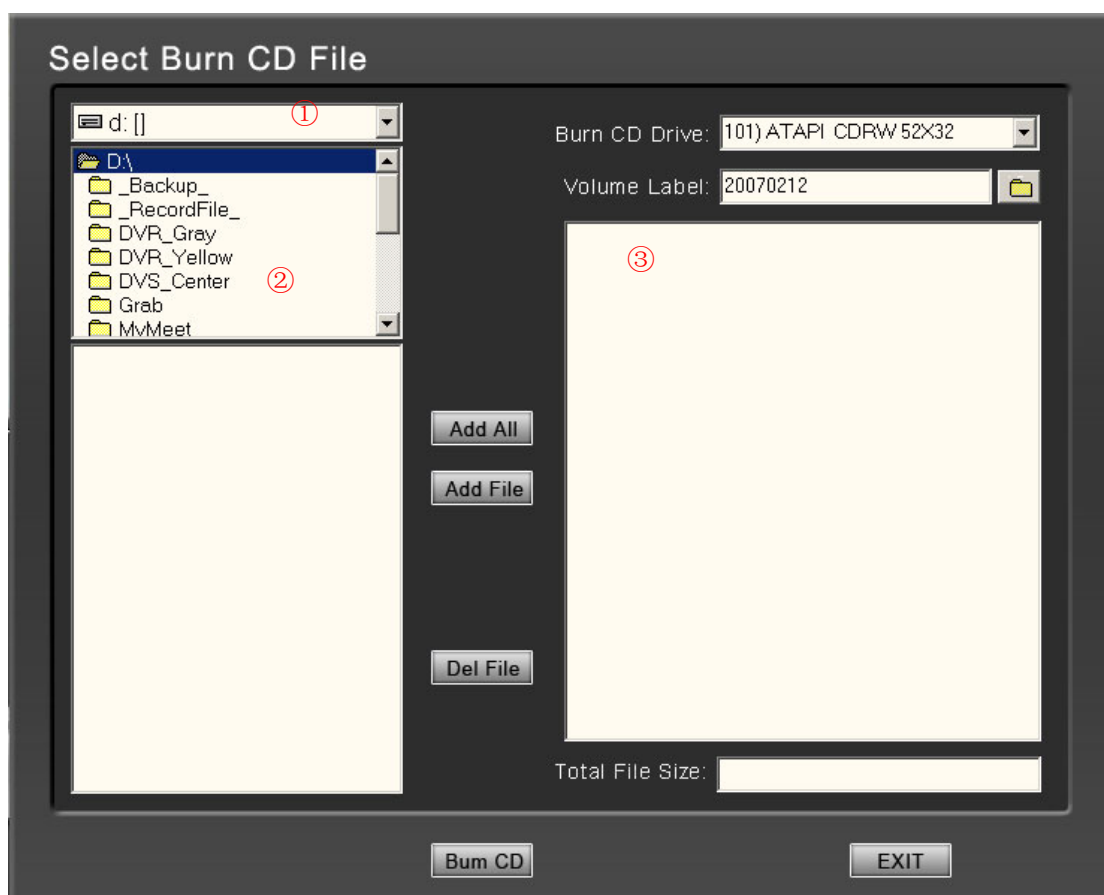
- a. **【Select channel】** Select channel.
- b. **【Save Path】** Select path of the backup file.



- c. Select one file from File List and Double-Click it, this file will be played. The united file is named by “date + begin time” and “date + end time”.

- d.  Capture a picture.

- e.  Burn CD



Area ①: File directory.

Area ②: File list.

Area ③: The File directory and list of will be burned to CD.

Icon ④: Create a new directory in area ③.

**Add All**: Add all the file from area ② to area ③.

**Add File**: Add selected file from area ② to area ③.

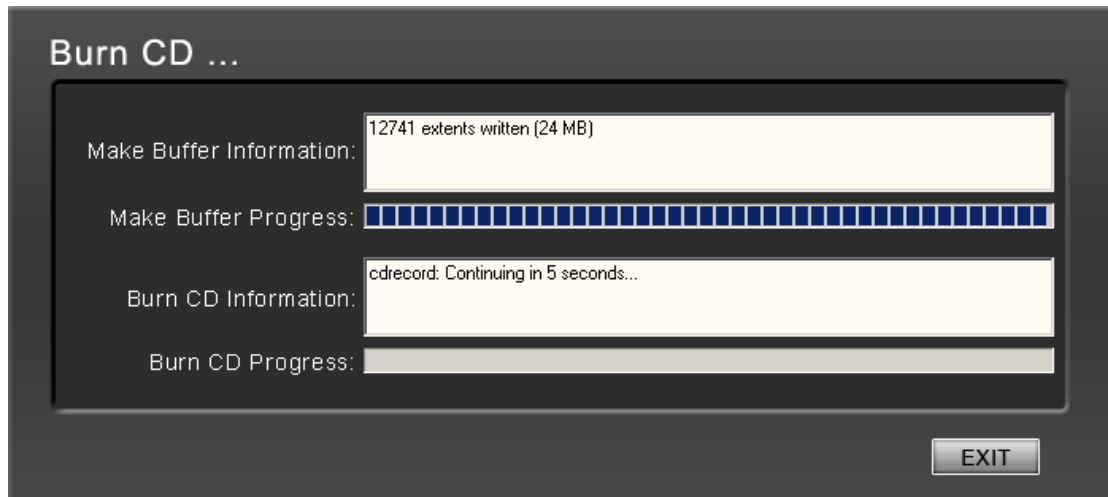
**Del File**: Delete selected file from area ③.

**【Burn CD drive】** Select CD-ROM driver.

**【Volume label】** Set the CD's label.


**【Total file size】** Show the size of all files will be burned to CD.

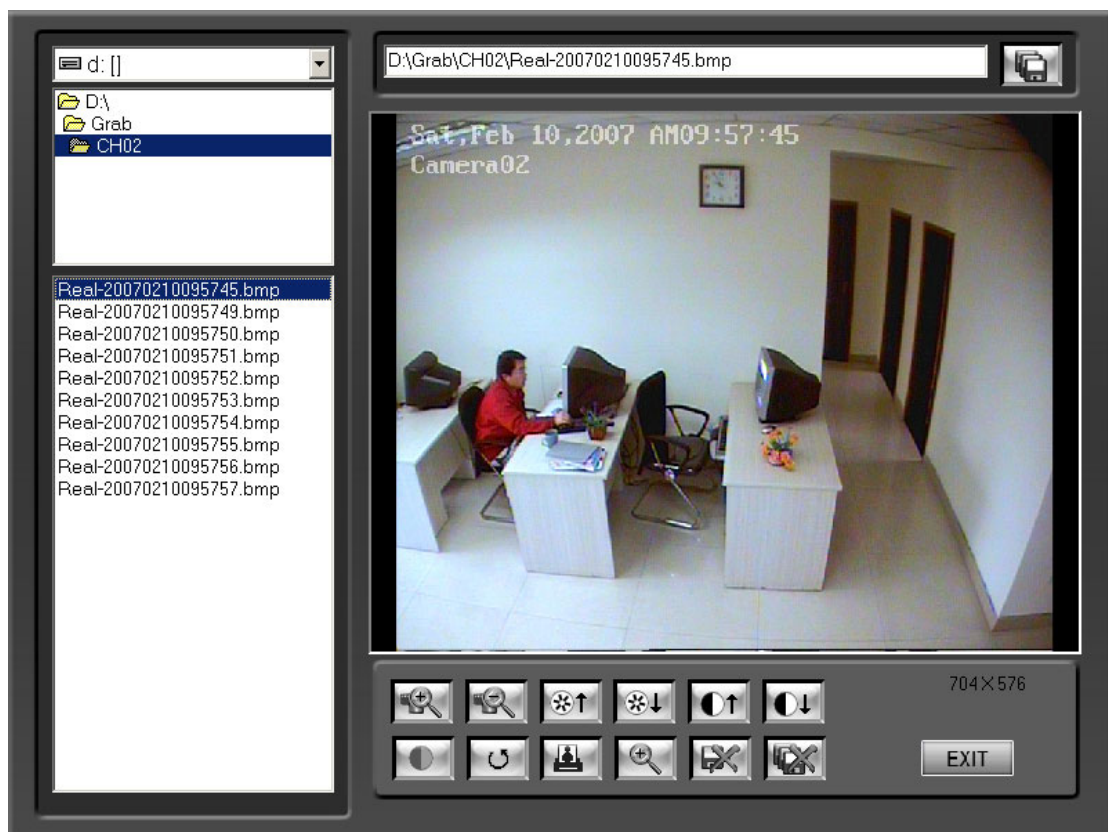
**Burn CD** When you finish your setup, click this button to write file to CD.



f. **【Copy player】**  button to copy professional player for done file to local PC

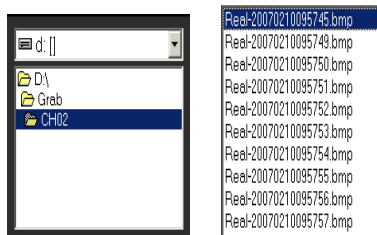
## 4.6 Search captured picture

Click  to enter the search captured picture window:




**【Select pictures from directory and file list】** You can select a captured picture from directory list and file list in local disk and the file name will show in

the top of the window.



**Note:**

If you want to save the reworked picture in another file, you can change its name and path here, with BMP or JPG as suffix. Then click the button .

#### 【Related operations】



Save the reworked picture.



Functional buttons of picture

disposal.



When the result of disposal is not good click it to the default.



Print picture, when the image is wider than 400 pixels, it will be printed smaller. On the other hand, it will be printed bigger.



When it's bright, with the mouse moving, part of the picture will be enlarged.





Delete current file or delete all files.

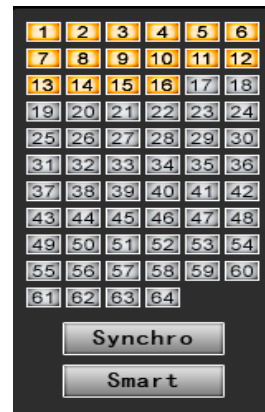
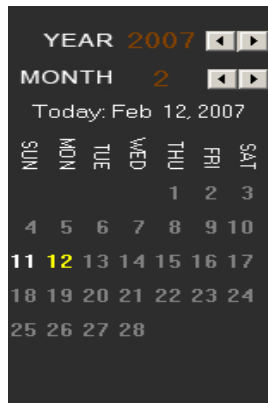
## 4.7 Fast search



Click button to show the date:


The green date is the current date. The gray dates signify no data. Only those blue and green ones can be selected and when they are selected the camera window will appear automatically to show which cameras has record data.

Click  or  to change month and year of search data.



## 4.8 Camera status



Click  button to show the cameras state. If the number is bright, it means there has record data in this channel.

### 4.8.1 Synchronic play

Click  button to synchronize all playback channels time.


### 4.8.2 Smart search

#### 1. Function introduction:

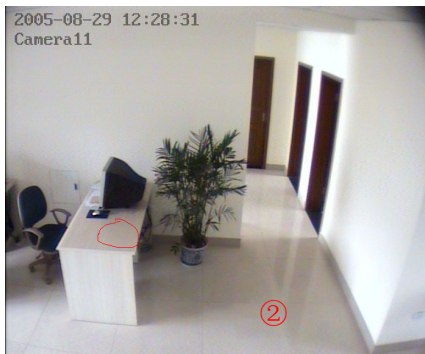
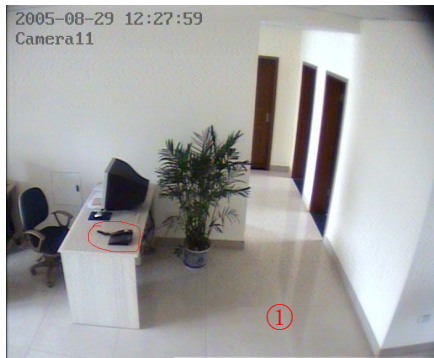
This function allows users to draw a zone on a video image and do a search for any motions, missing objects, or unattended object events occurred in that zone. It can help you find recorded video you are interested.

Notice: Smart Search accuracy is decided by sensitivity value in [Motion Setup](#)

#### 2. Operation and example

Press  button, then select a search area, the system will play all motion occurred within this area from previous 3 seconds to next 3 seconds when the motion occurred. Pressing this button again will end smart search.

E.g.:



1. There is a telephone on the desk (Picture ①).


2. But it disappeared now (Picture ②).

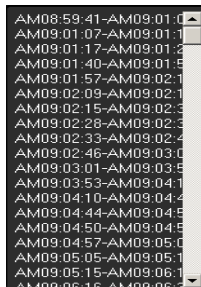
3. If you want to know where the telephone is, you can select this area on the image to do a smart search when playback the video.

Note:

1. Press synchronic button while smart search is running, system will end smart search.
2. The sensitivity of the smart search is same as motion detection. If you set a high sensitivity, system will search even that there is no motion in specified area. Contrarily, if you set a low sensitivity, it is possible that system will not search when there is some small range motion in specified area. So you should set the sensitivity according to the surroundings.

## 4.9 Show files

Click  button to show all the files of current cameras.



Last frame, Start, Pause, Stop and Next frame



First frame of that day, Last min., Next min. and Last frame of that day.



Image zoom out. Press this button, single click the left mouse button on a image, quarter of the image will be enlarge. By thereafter, single click right mouse button on the image ,it will resume the normal.



Adjust the voice, click the button to clear the voice.



Adjust playing speed, click the button to resume

normal playing speed.

**\*Note:**

1. It is not suggested that multi-channel (more than 10 channels) record and playback coinstantaneous unless your PC has a wonderful configuration, because the data throughput of HDD is huge. Multi-channel search in client and server are the same except their paths. In client there are local and lan search. In lan search, it searches among the record data in the local network of server.

## Chapter5 IE client

The client user can view video of DVR Server through Internet Explorer, The default web server port is 80; if [user changes it to other port](#), user should add this port number after domain name when visit the video of Server through Internet Explorer. E.g.: <http://192.168.0.119:1280>.

### 5.1 Functions of IE Client


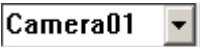



1. Video display and video storage;
2. Audio input;
3. Searching and playback video image locally or remotely;
4. Control PTZ and speed demo remotely;

### 5.2 Main interface

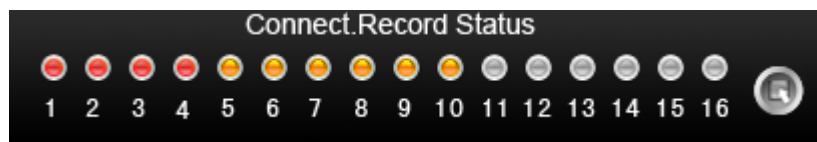
When you connect foreside server successfully, you should input valid User ID and password in left up of the interface to acquire rights to play video and other operations.



## 5.2.1 Connection operations

Press  will connect the DVR Server's camera video from  and press  will disconnect all connections. If DVR Server's channel is more than channels that you selected partition mode, you can use  button to display DVR Server's video in sequence. Pressing button  will switch full screen mode and Right-Single-Click image can back to normal mode.

## 5.2.2 Connection/Record status




This icon indicates the current connection and their record status:

Gray: Not connected;

Navy blue: Connected with no recording;

Green: Connected with recording.

You can change the record status by pressing corresponding number button or change status of all connections at the same time by pressing  button.

## 5.2.3 Partition mode

You can set the partition mode by pressing corresponding button on the right of main interface. It has follow partition modes:

 —1partition mode;

 —4partition mode;

 —6partition mode;

 —9partition mode;

 —10partition mode;

 —16partition mode.

## 5.2.4 PTZ Control

Most functions of PTZ control are same as [PTZ Control panel](#) in DVR Server.

## 5.2.5 Quit program

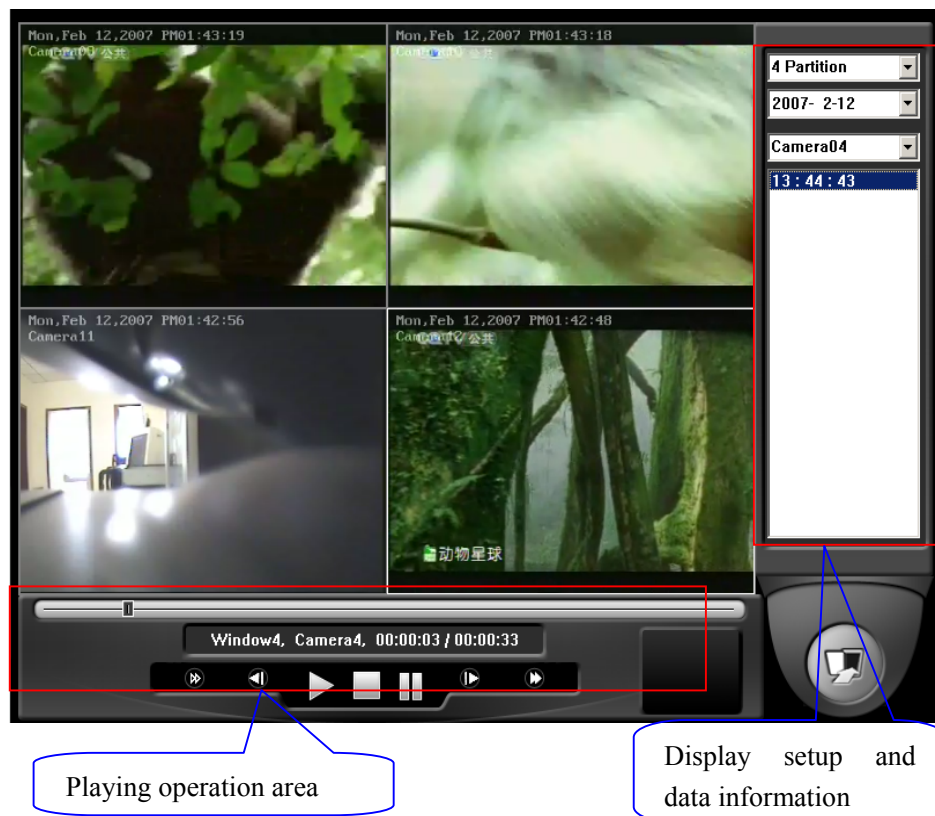


Press button to shut down the IE Client.

## 5.3 Local search



Press button to enter local search:




### 5.3.1 Display setup and data information

In this area, you can select display partition mode, date, video channel and its video file named according to time.

### 5.3.2 Playing operation area

In this area, you can operate video playing:

**【Video-playing time adjustment】** Press and drag slider bar

 to adjust video-playing time

**【Information display panel】** Display current window name, camera name and record data information.

Window4, Camera4, 00:00:03 / 00:00:33

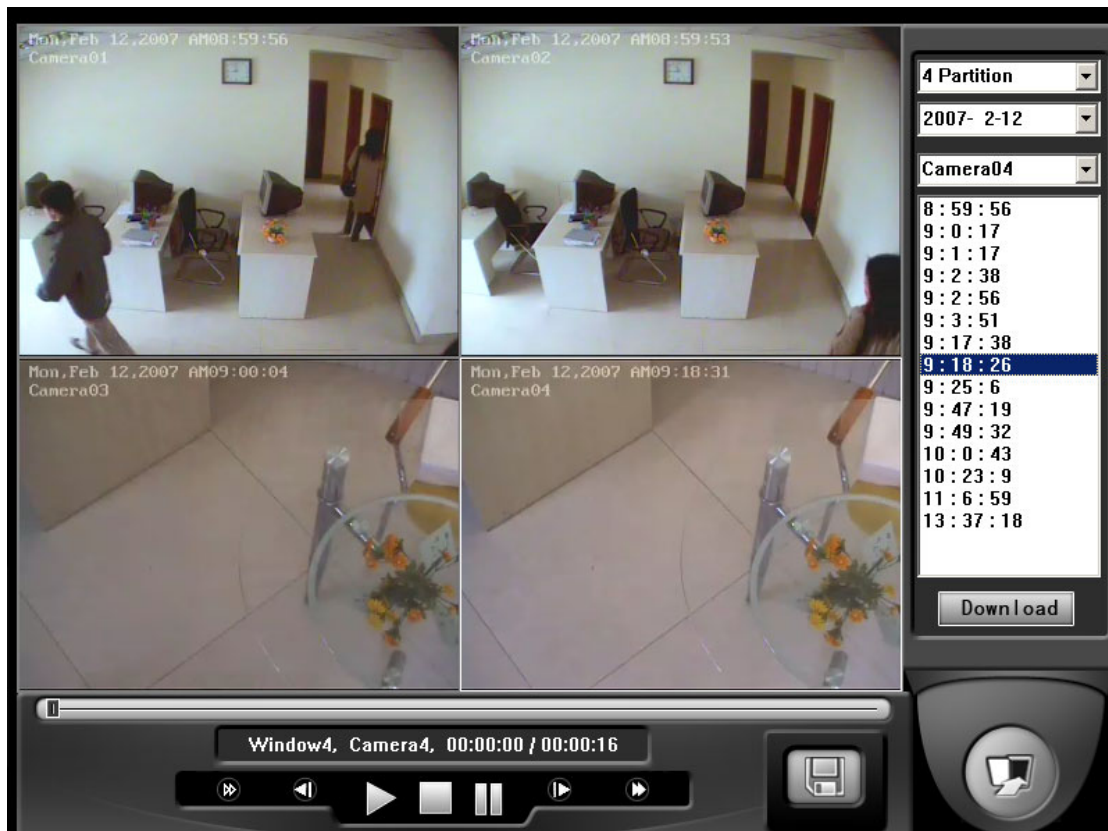
**【Playing-control buttons】**    : Play, Pause, Stop.


**【Single frame play】**  /  : Previous frame, next frame

**【Playing speed control】**  Slowly play  Fleety play


## 5.4 Remote search

Most functions and operations of Remote search are same as [playback](#); different feature is that remote search added download feature

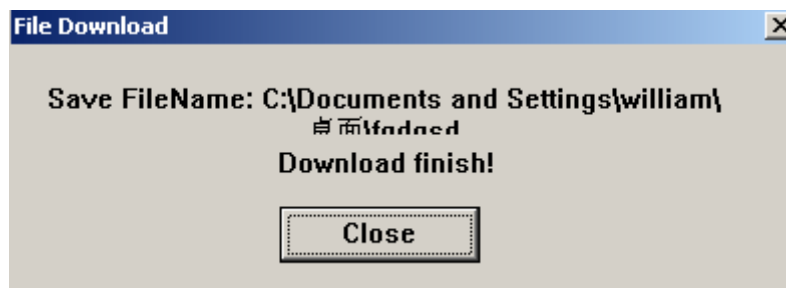


When you playback remotely, you click  button, system will save video of current channel you selected. After finishing it, system will inform the save path.

### 5.4.1 Fast download record data

In the playback mode, select one camera that has record data, open file list panel, select one record data file, and click  button, the selected data file will download fast.

8:59:56  
9:0:17  
9:1:17  
9:2:38  
9:2:56  
9:3:51  
9:17:38  
**9:18:26**  
9:25:6  
9:47:19  
9:49:32  
10:0:43  
10:23:9  
11:6:59  
13:37:18



**NOTE:**

When user use IE client to visit DVR server, If connect successfully, there will appear four partition blue window. If connect unsuccessfully, the reasons possibly are:

- ①. The Web server port has been used by other programs.
- ②. Your computer didn't download the player plug normally. The reason may be the jurisdiction of your computer is too high, or your computer has plug filter.

# Chapter6 Mobile Client

## 6.1 Recommended Mobile Phone Requirements

① Before you run Mobile Client, please check if your mobile phone supports JAVA and comply with following applicable standards:

CLDC version: CLDC-1.0

MIDP version: MIDP-2.0

② Your mobile telephone should have GPRS or CDMA to transport data.

③ Set Internet as the access point of your phone call.

④ Select “Enable” to allow the PDA to connect With DVR server in the [network setup](#) of the DVR system.

⑤ To use PDA connection normally, the DVR board should support dual compression and user must open sub channel compress in [camera setup](#). User should select “CIF ” or “QCIF” but not “same as recording” for remote **【Remote Image size】** .

**Note:** GPRS is charged by data flow, so shut down the MobileDVR application if you do not need to view cameras.

## 6.2 Download software

You have following methods to download our mobile client software:

- 1) Download through wireless technology (in Wireless LAN) such as Blue tooth, infrared.
- 2) Copy mobile client software to phone directly through data cable.
- 3) Download mobile client software through OTA (in WAN), it will describe as follow:

Enter “http://IP:PORT/mobiledvr ” in the address bar of the mobile telephone internet explorer to download the setup package of the Mobile Client.

**Note:**

IP: the IP address of the DVR server.

PORT: the Port of the IE client of the DVR server.

When you download mobile client software on WAN, you must be sure that your mobile phone connect with Internet correctly.

## 6.3 Install and connect

### 6.3.1 Installation

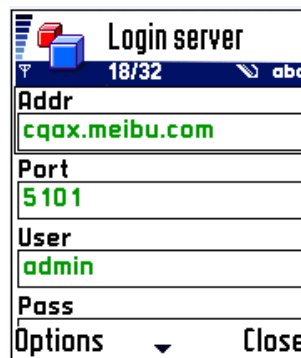
You can install the mobile client as install java games in your smart phone, install mobile client in your smart phone directly (downloaded the program in WAN or LAN) or use the application supplied by the manufacture of your smart phone to install mobile client.

### 6.3.2 Connection

After you installed mobile client in your smart phone, you should be sure that your smart phone connect with Internet correctly. Currently, mobile providers support WAP and WEB access point, mobile client must use Internet as access point (AP) to access DVR Server remotely.

## 6.4 Login Interface

After you downloaded and installed the MobileDvr software, you can run it on your mobile phone to enter the login interface.

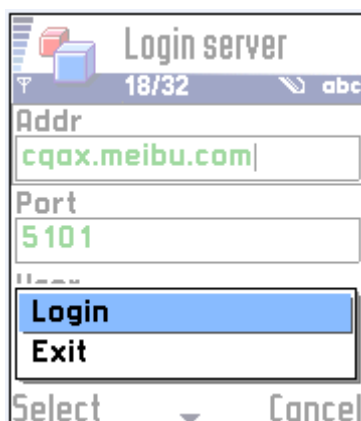


The screenshot shows a mobile application window titled "Login server". At the top, there is a status bar with a signal strength indicator, a battery level of 18/32, and the text "abc". Below the title bar, there are four input fields: "Addr" with the value "cqax.meibu.com", "Port" with the value "5101", "User" with the value "admin", and "Pass" which is empty. At the bottom of the form, there are two buttons: "Options" with a dropdown arrow and "Close".

【Addr】 Fill the IP address or domain name of the DVR server.

【Port】 Fill the port through which connects to DVR Server.

【User】 / 【Pass】 Fill the valid user with its password to visit server from MobileDvr. And the server has enabled rights management, login user ID and password from client will be checked. If the user has no right to visit that camera, the connection will be cut down automatically.



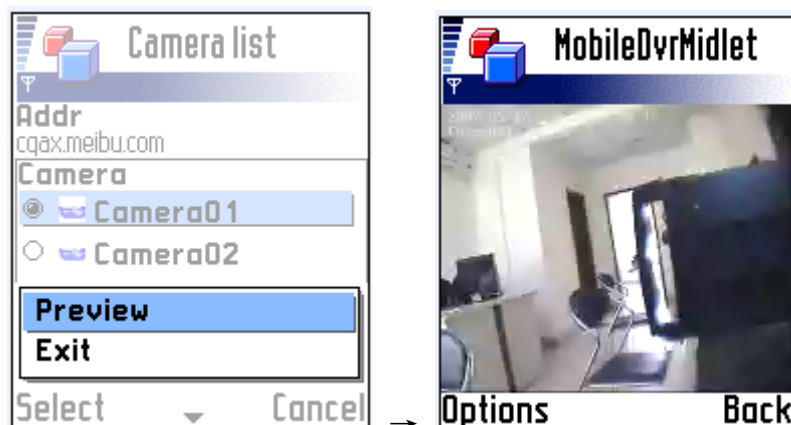
Press "Login" button to connect the DVR server.

## 6.5 Camera List

The MobileDvr will enter the Camera List after you connect the DVR server successfully.



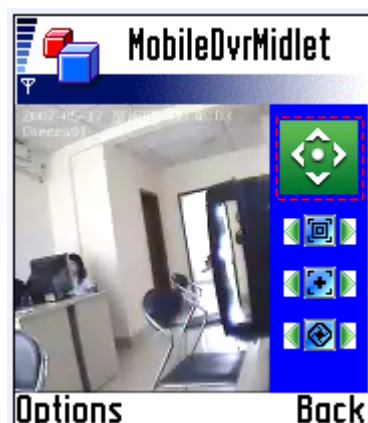
Select the Camera you want to browse and press the "preview" button to get the image from the server.




## 6.6 PTZ control



Press the “Options” button and select the “PTZ” button to enter the PTZ control interface.




【Orientation control】: Select the  button and press “OK” ,it will

change into . After that, by pressing and holding the up, down, right and left buttons, the PTZ camera will move up, down, right and left.

*Note: Please try “5”button on your phone if pressing “OK” does not work..*

【Zoom + / Zoom -】:  Control the zoom function of the PTZ camera.

【Focus+ / Focus -】:  Overrides the auto-focus setup of the PTZ camera, adjust focus the image.



【Iris on/off】:  Overrides the PTZ cameras auto-iris and brighten

or darken the image.

# Chapter7 Appendixes

## 7.1 Appendix A: Fast key reference

Please refer to [shortcuts keyboard setup](#)

Esc	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	Print	Scroll	Pause					
~	1	2	3	4	5	6	7	8	9	0	-	=	←Back	Insert	Home	Page Up	Num	/	*	-
Tab	Q	W	E	R	T	Y	U	I	O	P	[	]		Delete	End	Page Down	7	8	9	+
Caps	A	S	D	F	G	H	J	K	L	;	"	Enter					4	5	6	
Shift	Z	X	C	V	B	N	M	<	>	?	Shift	\					1	2	3	Enter
Ctrl		Alt	Space Bar							Alt		Ctrl	←	↓	→	0	.			



This color key denotes PTZ control.



This color key is other function control.

PTZ control:

Key	Function
↑	Up(in the status of preview for PTZ control)
	Play in fast speed (in the status of instant playback and review playback)
↓	Down(in the status of preview for PTZ control)
	Play in slow speed (in the status of instant playback and review playback)
←	Left(in the status of preview for PTZ control)
	Play last frame(when pause in the status of instant playback)
	Play again(in play condition of review playback)
	Play last frame(in pause condition of review playback)
→	Right(in the status of preview for PTZ control)
	Play next frame(in the status of instant playback)

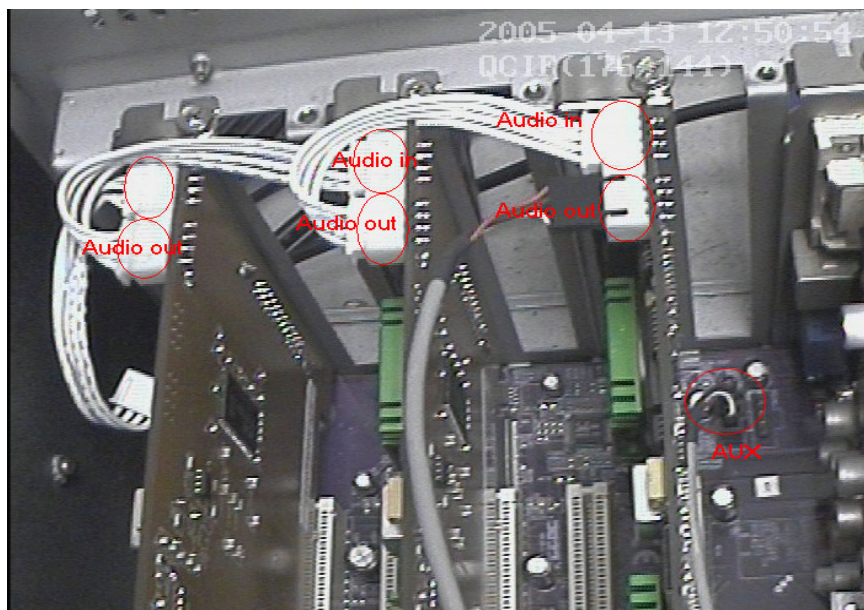
	Play in normal speed(in play condition of review playback)
	Play next frame((in pause condition of review playback)
Home	Zoom-
End	Zoom+
Insert	Focus-
Delete	Focus+
C、—、 Num0-9G、 Enter	Presets Control OperationCall preset
C、—、 Num0-9	Presets Control Operation

Other controls:

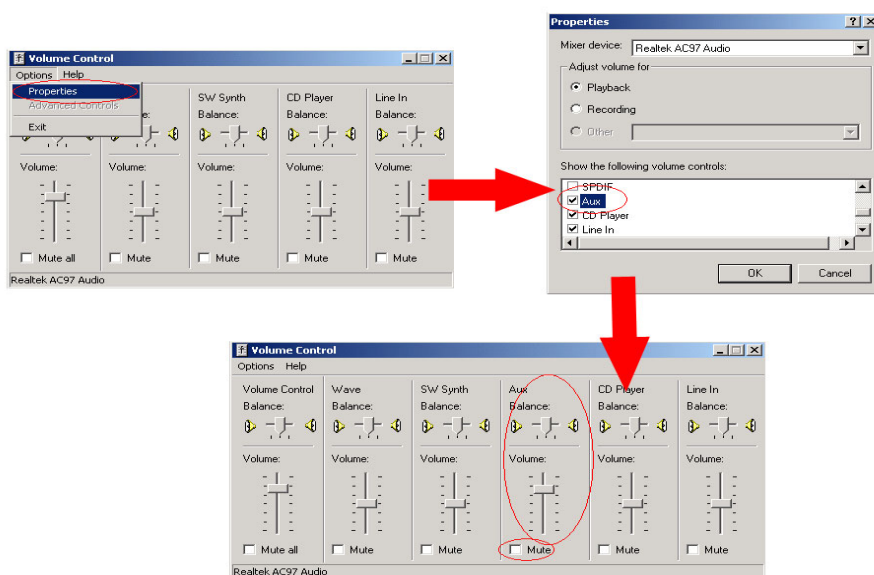
Key	Function
F1	System Help
Tab	Switch the camera channel
Page Down	Next screen
Page UP	Previous screen
F9	All cameras recording 30 Sec emergency
F11	Zoom in/out the single camera view
F12	Switch to Full screen mode (Equivalent to pressing space key except Instant Playback mode)
Ctrl + 0	Enter playback
Ctrl + 1-9	Instant playback minutes
Shift + 1-8	Select screen partition 1,4,9,16,25,36,49,64
WIN+ Z	Minimize the Main System window

## 7.2 Appendix B: Audio preview

First, connect the card use the cable, as follows:



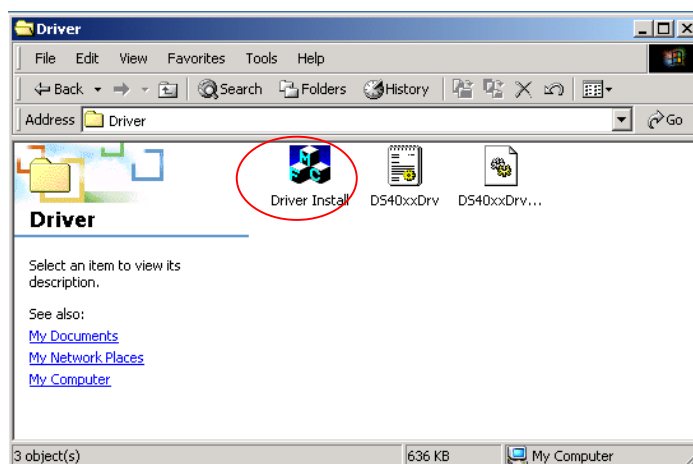
NOTE: Sometimes there is no preview sound, Solution: double click the volume control of in the taskbar, open the properties dialog box, and check AUX control.



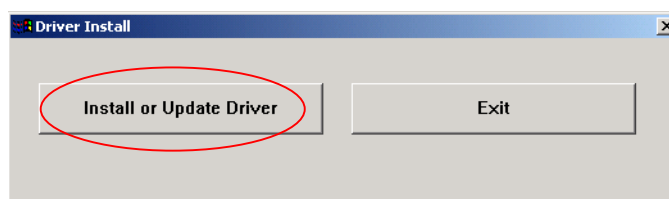
## 7.3 Appendix C: Update drivers of compressed card

If you first install the card or upgrade the DVR software, you should install or update the card driver. The steps are as follows:

- 1) Find the driver folder, and run "driver Install" program.



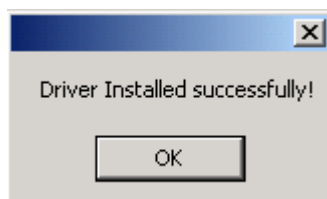
- 2) A dialog will show on the screen.



- 3) Click "Install or Update Driver" button, a prompt UI will inquire you, click "yes", the program will continue the installation.

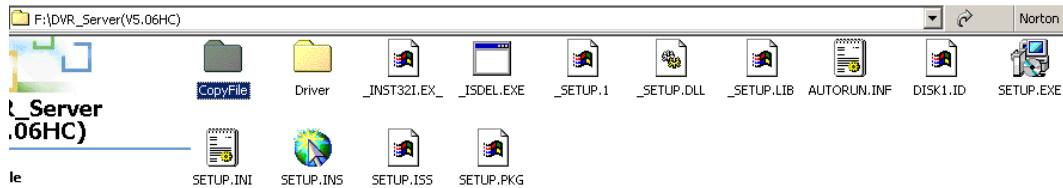


- 4) If the driver installed successfully, the program will show you a prompt, click OK, the install driver program finished.



## 7.4 Appendix D: How to use “Copy File” folder.

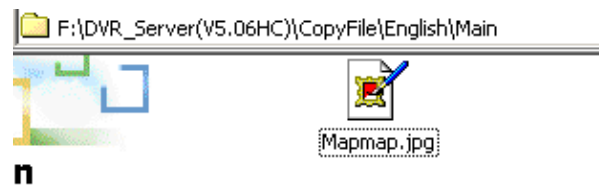
In installation CD, there is a file named “CopyFile”



If you want to replace some files in installation directory, you can copy new files into “CopyFile”, when you finished the installation, the new files will replaced the old files.



If you want to replace some files in sub directory of installation directory, you can create the same directory in “CopyFile” folder with the installation directory.



Thus, when you finished the installation, the all files which in “CopyFile” will replace the old files.

**Note:** If you replace the image, the new image’s size and name should be same with old image.

## 7.5 Appendix E: Explanation about NV series DVR board.

This DVR System manual is suitable for all NV series DVR board

(NV400XHC,NV400XC,NV400XCE,NV4016HCS)

NV400XHC: support double encoding, when “image size” was selected “D1 Auto F”,NV400XHC card only single encoding.

NV4016HCS: Single encoding.

NV400XC:Single encoding.

NV400XCE:Support double encoding.

## 7.6 Appendix F: Frequent Asked Questions

- 1) IE client does not visit the server.

Possible reasons: The Web Server port was shielded or has been used by other program.

- 2) Install one card in a PC can run the server program, but install more cards can't run the server program.

Possible reasons: PC Motherboard compatibility issue, please change other brand Intel chipset motherboard and display card.

- 3) Can't view image of cameras

Possible reason: for reduce the load of CPU, we use overlay as the display mode; it output the data from graphic card to monitor directly, please check whether the graphic card support overlay.